

# Consumer protection in the domestic energy efficiency and renewable retrofit market

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## Final Report

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# Executive Summary

## Introduction

Reducing energy demand for domestic heating and appliances is a priority in mitigating against climate change and fuel poverty. The Scottish Government's plans, as laid out in the Energy Efficient Scotland route map, involve the reduction of energy demand through the widescale retrofit of energy efficiency measures and the adoption of renewable and low carbon technologies in order to decarbonise the heat supply.

Good consumer protection measures are a prerequisite to any successful industry, not least one with considerable challenges engaging with consumers and the requirement to meet an anticipated step change in demand. This report identifies gaps in the existing consumer protection provisions in Scotland's domestic energy efficiency and renewable retrofit market and outlines recommendations for a robust consumer protection framework.

## Key findings

**Successes:** Certain criteria put in place by consumer code and guarantee organisations for accredited installers showed an array of good practice such as, taking of photos pre-install and during install, independent inspections of work, frequently updating accreditation lists and paying upfront for remedial work to be delivered. However, these practices are not implemented by all code and guarantee organisations and there is limited auditing to check installers are adhering to guidelines.

**Awareness:** Stakeholders felt that awareness of consumer codes, guarantee organisations and certification schemes was low among consumers. The large number of organisations involved makes checks of installer accreditations and navigation of redress very challenging. There is little customer journey information to help consumers understand what to consider at each stage of the installation process to avoid common pitfalls, or path of redress when issues arise. Vulnerable consumers targeted through cold-calling and door-stepping are at greatest risk.

**Connections** between existing provisions are limited adding to confusion and challenges when it comes to seeking redress. A lack of referral mechanism to enable communications between organisations leaves signposted consumers having to repeat their distressing experiences. Some attempts had been made to reduce the number of layers needed by combining code and guarantee structures. Examples identified include collaboration between Microgeneration Certification Scheme (MCS) and the three Chartered Trading Standards Institute (CTSI) approved consumer codes and organisations such as MCS and Renewable Energy Consumer Code (RECC) auditing one another's practices.

**Gaps** are considerable across the customer journey, some of the key issues include:

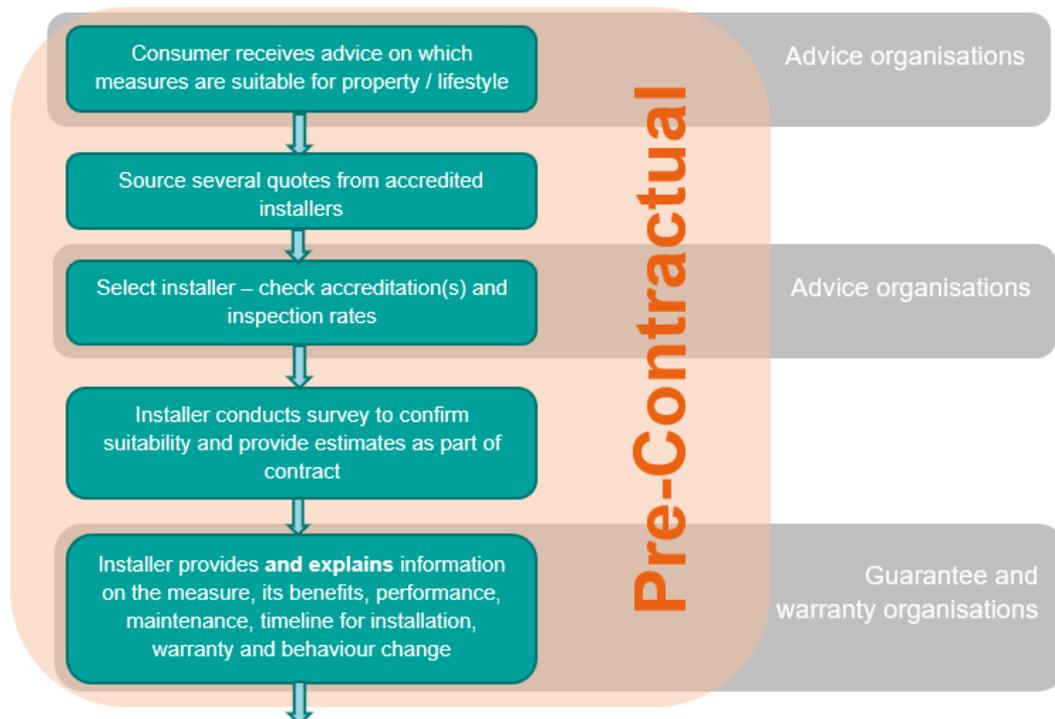
- **Pre-contractual:** Mis-selling either through sale of inappropriate technologies or exaggerated savings and a lack of pre-installation surveys impacting on warranty claims.
- **Contractual:** Lack of independent checks and auditing throughout the installation process.

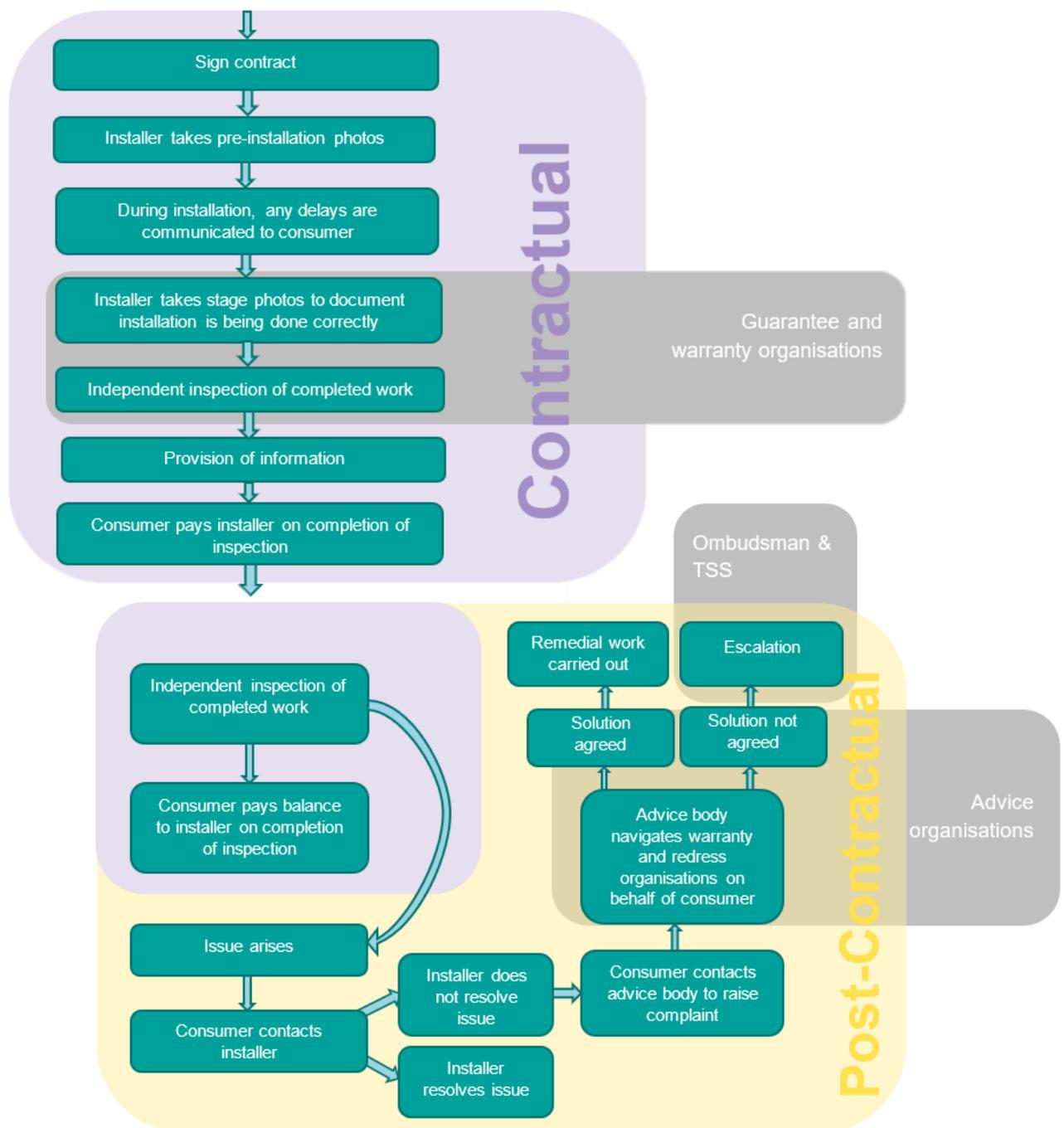
- **Post-contractual:** Difficulties in finding out who installed and insured measures. Warranties being invalidated due to a lack of consumer knowledge of maintenance requirements. Telephone numbers to lodge complaints are not always freephone.
- **Funded schemes:** Those accessing measures through funded schemes typically have greater protection due to higher levels of scrutiny of installers. This effectively creates a two-tier system of protection dependant on the measure or funding. However, these schemes often have limited funding per measure or property which can result in cutting of corners to turn a profit. This can be exacerbated when coupled with the use of sub-contractors without adequate oversight.
- **Monitoring:** There are no means to monitor the number and nature of complaints received, identify trends and take action to address emerging issues across the retrofit industry.

**Impact:** The impacts of these gaps in protections are wide ranging for consumers, including debt or financial loss, inability to sell or insure homes, issues caused by poor installation such as damp, mould and electrical hazards, unusable or ineffective heating systems and loss of deposit due to rogue installers or companies going bust.

### Recommended framework

Below is an overview of the proposed framework for consumer protection of energy efficiency and renewable retrofit in Scotland. The framework has been constructed using the findings from our research. It is structured around the ideal customer journey and highlights the provisions and organisations needed to protect consumers in a way that is robust and comprehensive. Accompanying recommendations can be found in the report (section 3).





## Conclusion

Five years on from the Each Home Counts review of the sector, it is evident that significant gaps remain for householders engaging with the renewable and energy retrofit market. If we are to successfully increase the energy efficiency of buildings and decarbonise our heat supply to meet climate change and fuel poverty targets, these issues need to be urgently addressed. Failure to implement a meaningful protection framework will result in considerable consumer detriment resulting in distrust in the sector. This will have a significant impact on the required rate of change and any momentum generated through an increased awareness of the climate emergency.

The step change in attitudes needed to take householders on the journey to Energy Efficient Scotland are considerable and possibly a step too far without confidence in the ability of the retrofit market to provide the standard and quality of the work needed. It is not enough to simply set up a scheme or programme to deliver work, as those who do not access the market through the 'correct' path, can experience significant consumer detriment. Instead the market along with its existing legislation, advice, guarantees, codes, warranties and support must be considered holistically.

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## 1. Introduction

Citizens Advice Scotland commissioned Changeworks to identify what constitutes a robust framework for consumer protection in Scotland's domestic energy efficiency and renewable retrofit market.

### Context

The timing for this research is pertinent.

In 2019 the Scottish Government declared a climate emergency, promising accelerated action to reduce emissions. The domestic sector currently makes up approximately one third of energy use in the UK, making it a considerable contributor towards carbon emissions. Whilst efforts are being made to 'green the grid' (i.e. use renewable technology to reduce the carbon impact of energy at source), the ageing and inefficient housing stock in the UK means that demand on non-renewable energy sources remains high. As of 2017, 58% of Scottish homes are estimated to be EPC band D or lower<sup>1</sup>.

The prevalence of inefficient housing also has significant impacts on its occupants. Fuel poverty remains a significant issue; in Scotland 11% (279,000) of households are estimated to be in extreme fuel poverty and a further 25% (619,000) in fuel poverty<sup>2</sup>.

To address these issues, in 2018 Scottish Government produced their flagship policy Energy Efficient Scotland. The route map for the Energy Efficient Scotland programme sets out that by 2040, all Scottish homes will be rated EPC C or above (where technically feasible and cost effective). This includes owner occupied homes and the private rented sector (in addition to the Energy Efficiency Standard for Social Housing).

Energy Efficient Scotland will require a substantive number of householders to engage with the energy efficiency and renewable retrofit sectors, some for the first time. It is therefore essential that consumer protection measures are considered from the outset to avoid detriment for these consumers, particularly vulnerable householders, and to empower them to safely engage with the market.

Not to do so would risk a repeat of the issues realised through the UK Government's Green Deal programme, which was poorly integrated into existing consumer protection practices. The result being a range of issues arising surrounding the Green Deal plans, in particular, Citizens Advice Scotland identified serious consumer detriment with one Green Deal supplier<sup>3</sup>, including mis-selling and pressure selling to vulnerable customers, issues with installation, misrepresentation and with redress amongst others. This was despite consumer protection measures being outlined by the Government and a code of practice in place for Green Deal companies. Trading Standards Scotland's 'Operation Kondracki' also investigated the mis-selling of Green Deal products and services. They found that these

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<sup>1</sup> *Scottish Housing Condition Survey (2018)*

<sup>2</sup> *Ibid*

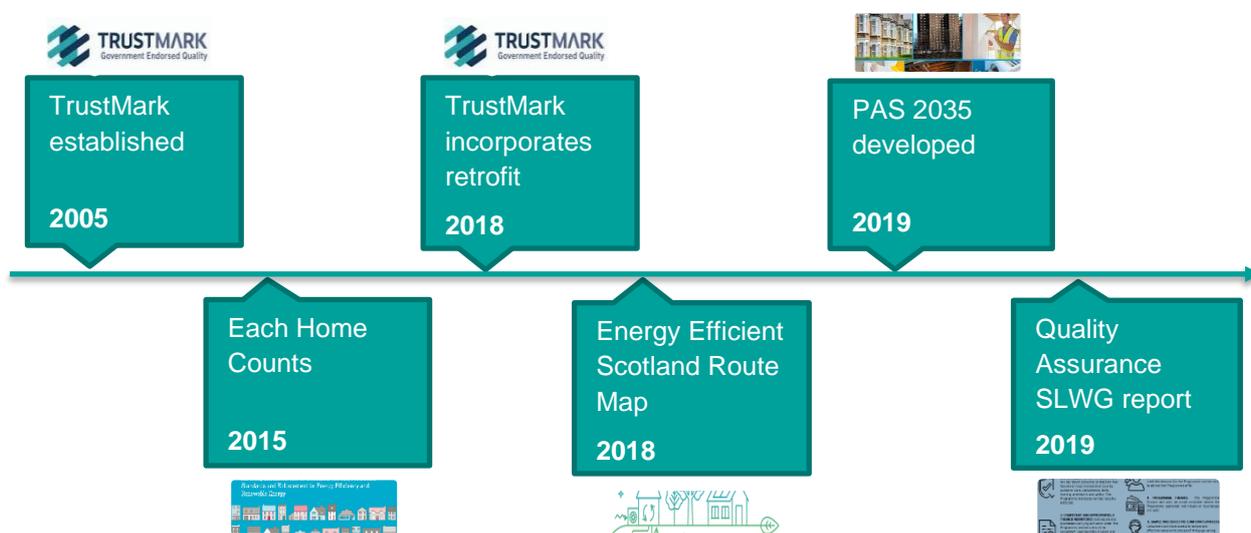
<sup>3</sup> *Citizens Advice Scotland (2018) [Bad Company: Finding solutions for the people ripped off by HELMS](#)*

issues could have been prevented if more rigorous checks had been made when companies were registered under the Green Deal.

There are a range of consumer protection measures currently in place for Scottish consumers in the energy efficiency and renewable retrofit market. These measures, such as legislation, consumer awareness and advice, and ability to raise complaints and criminal proceedings are managed by a range of stakeholders including Government, Ombudsmen, industry bodies and Police Scotland. These stakeholders need to interact to ensure the consumer has a full range of protection from harm.

### Building on existing research

This report follows a series of research, recommendations and recently implemented changes, which help to build a picture of the existing consumer protection landscape.



In 2015, the 'Bonfield Review' produced a consumer advice and protection standards framework to ensure suitable products are installed and sufficient monitoring and enforcement delivered. The output of the review, the Each Home Counts report<sup>4</sup> published in 2015, recommended the introduction of a Quality Mark. The Quality Mark would be awarded to companies operating in the energy efficiency and renewable sector who adhere to a Consumer Charter, Code of Conduct and a Code of Practice for installations. This has been incorporated to form part of TrustMark a UK Government Endorsed Quality Scheme, established in 2005. A new standard, PAS 2035, has also been developed providing a specification and best practice guidance for domestic retrofit projects.

In March 2019, a report was published by the Scottish Government Quality Assurance Short Life Working Group (SLWG) on Quality Assurance<sup>5</sup> in response to the development of the Energy Efficient Scotland programme. This focused on the quality, skills, supply chain and

<sup>4</sup> Peter Bonfield (2016) [Each Home Counts: An Independent Review of Consumer Advice, Protection, Standards and Enforcement for Energy Efficiency and Renewable Energy](#)

<sup>5</sup> Quality Assurance Short Life Working Group (2019) [Recommendations Report](#)

consumer protection requirements of Energy Efficient Scotland. With representatives from across industry and consumer organisations, the Quality Assurance SLWG put forward recommendations for a quality assurance framework, including five specifically on consumer protection, including a well-defined complaints procedure, data sharing between key agencies, contractual agreements, clearer information to avoid mis-selling and advice on guarantees and warranties.

### **Aims and objectives**

The aim of this project is to identify what an effective Scottish consumer protection framework would look like in the domestic energy efficiency and renewable retrofit market in order to avoid consumer detriment in the first place, and remedy it when it does occur.

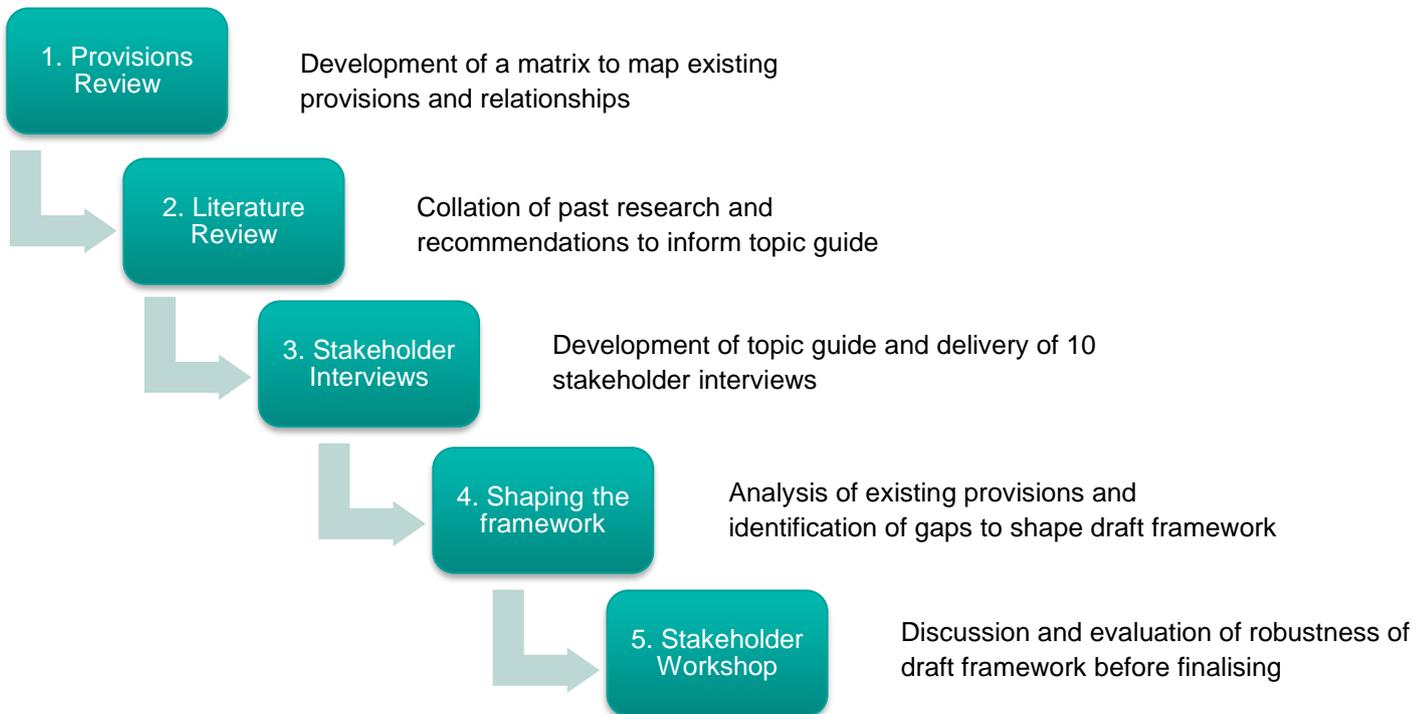
The following objectives were followed to fulfil this aim:

1. Review of the current consumer protection landscape relevant to the energy efficiency and renewable retrofit market. Including awareness of existing provisions and the extent to which they link and operate as intended.
2. Identification of the changes required to ensure there is a robust 'consumer protection framework' in place under Energy Efficient Scotland which protects against mis-selling, fraud, poor quality products and services in a way that is joined up and fit for purpose.

## 2. Methodology

### Methodology overview

The following diagram outlines the approach taken to deliver this research. Further detail is outlined below.



#### 1. Provisions review

A matrix was developed to enable an understanding of existing provisions to protect and support retrofit consumers in Scotland. This gives an overview of the legislation, standards and support in place at each stage of the customer journey across a range of measures. The matrix helped to identify appropriate stakeholders and gave an initial understanding of the possible gaps, helping to shape the development of the topic guide.

#### 2. Literature review

A literature review was conducted to inform research design and ensure that the project built on this existing research and recommendations. The review explored:

- Customer awareness and understanding of consumer protection facilities
- Gaps identified in the existing policies, advocacy support and communication of the support available
- Customer experiences resulting from the aforementioned issues
- Previously identified recommendations

The types of literature reviewed included the following:

- Research surrounding consumer protection provisions

- Research exploring possible consumer detriment resulting from gaps in consumer protection framework
- Unpublished data requested via interviewed stakeholders on number of complaints, and issues experienced.

A list of the literature reviewed is provided in Appendix F.

### **3. Stakeholder interviews**

Stakeholder interviews explored the robustness of existing consumer protection policies and looked for insight to help identify possible areas for improvement.

An interview topic guide was developed, informed by the desk-based research. The interviews covered the following topics, with emphasis on areas of most relevance to the stakeholder:

- Issues experienced by consumers, including anecdotal evidence of the range of experiences and common trends
- Identification of gaps in existing provisions:
  - Advocacy
  - Communication
  - Relationship between actors
  - Redress – successes and challenges experienced
- Identification of possible solutions

The interviewed organisations included Changeworks, Trading Standards Scotland, Home Energy Scotland, Citizens Advice Bureaux, PAS 2035, Solid Wall Insulation Guarantee Agency, Renewable Energy Consumer Code, Caste Rock Edinvar Housing Association, Short Life Working Group and Energy Saving Trust.

The interviews were around 45 minutes long and were carried out face-to-face and via telephone; depending on the location of the participants.

Interviews were analysed using the qualitative data handling software Nvivo. The analysis involved creating a high-level coding structure based on the topic guide; and expanded upon as the analysis developed to establish a framework identifying key themes emerging from the interviews.

### **4. Shaping the framework**

The framework illustrates how the suggested measures and processes, actors and their relationships would provide consumer protection across the customer journey. The formation of the framework was based upon the ideal customer journey. It also outlines the additional provisions needed to avoid issues arising outside of the ideal customer journey. These include policy and legislation, advocacy, relationships between stakeholders to support delivery and mitigation, and communication of the support available.

The framework and proposed provisions were judged against the following criteria:

- a) How well they perform in meeting key principles, leading to a fairly sold and quality retrofit installation.
- b) The extent to which they align with or hinder wider policy objectives of the Scottish Government in this area. This focused foremost on Energy Efficient Scotland, but also other areas, for example commitments to reduce carbon emissions from housing stocks and to provide affordable warmth to social housing tenants.
- c) Vulnerable consumers, including those at risk of fuel poverty, should have special provisions to ensure they do not suffer disproportionate detriment.
- d) Both regulations and non-regulatory mechanisms should not be overly burdensome or costly to implement. Costs will be passed onto consumers and/or result in widespread non-compliance and could, on balance, do more harm than good.

## **5. Stakeholder workshop**

A stakeholder workshop was carried out with those who were interviewed and a wider group, including those who might be affected by the recommendations. The workshop was attended by the following organisations: Citizens Advice Bureaux, Trading Standards Scotland, Cavity wall Insulation Guarantee Agency, Changeworks, South Lanarkshire Council, Renewable Energy Consumer Code, Scottish Government, TrustMark, Energy Saving Trust, Viewpoint Housing Association<sup>6</sup>.

The aim of the workshop was to explore the impact of each aspect of the framework on both the consumer, the wider industry and the delivery of Energy Efficient Scotland. The findings and draft framework were presented. The framework was divided into the three key areas of the customer journey; pre-contractual, contractual and post-contractual and discussed in a series of roundtable groups.

Each of the groups were asked to perform a light touch Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis on each of the three areas of the framework. The strengths and weaknesses of each regulatory and non-regulatory mechanism were judged against how well they could support improvements to the energy efficiency of homes in Scotland.

Findings from the stakeholder workshop discussions were used to amend the framework and are presented in this report. Notes from the SWOT analysis can be found in Appendix E.

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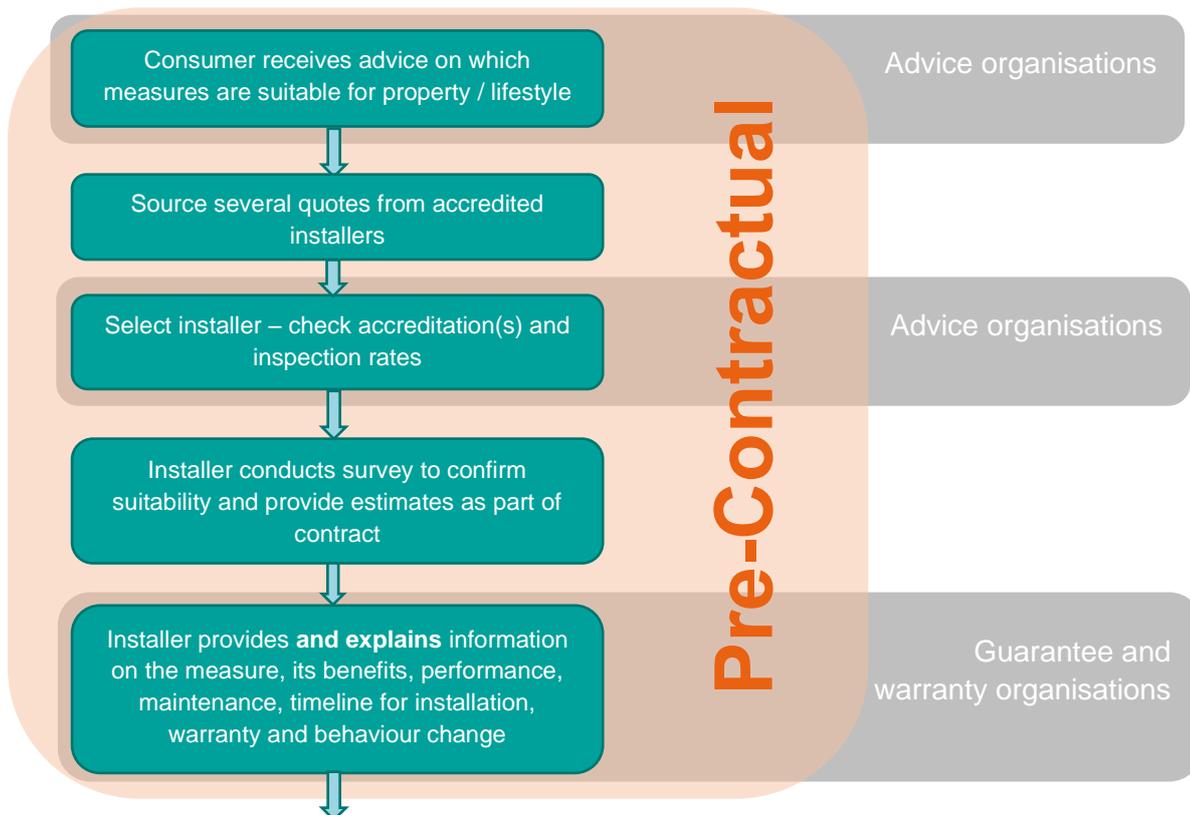
<sup>6</sup> Note: A number of installers were invited, but unfortunately none were able to attend.

### 3. Framework

This section presents the proposed framework for consumer protection of energy efficiency and renewable retrofit in Scotland. The recommended changes needed to protect consumers are not insurmountable and the existing model can largely be adapted, drawing together existing provisions and organisations to prevent consumer detriment.

The framework has been constructed using the findings from our research. It is structured around the ideal customer journey and highlights the provisions and organisations needed to protect consumers in a way that is robust and comprehensive.

#### 3.1 Pre-contractual recommendations



Recommendations needed to form and ensure delivery of these provisions are as follows.

#### Collective support package:

- 1. A standardised package of advice.** A multi-agency group formed and working together to devise clear and concise advice to avoid consumer detriment. The multi-agency group should include Home Energy Scotland, Consumer Scotland, Advice Direct Scotland, Trading Standards Scotland, Citizens Advice Scotland and Scottish energy advice organisations; with one organisation acting as co-ordinator. Members of the group should be given additional funding from Scottish Government to attend group meetings and contribute towards the creation of shared resources.
- 2. A clear referral network** established between advice organisations to refer householders to Home Energy Scotland for more in-depth support, including home

visits for more complicated measures and advice on which measures are more suitable for their home.

- 3. Clear customer journey information** for each type of measure and funding stream; illustrating the various organisations involved and the steps need to avoid consumer detriment. This information would be developed by the multi-agency group, building on existing resources.
- 4. Investment to raise awareness** of advice services to ensure householders know where to go to check the legitimacy of organisations promoting their services through tele-sales and door-stepping.
- 5. Verification of installer memberships and current inspection rates.** Advice organisations should offer a service to independently check installers have the correct memberships (via the member websites) and the current inspection rates imposed upon the installer which give an indication of their performance. These inspection rates should be made readily available by guarantee organisations.

#### **Pre-contractual audit:**

- 1. Installer information provision audited by independent organisations.** Spot checks delivered by existing consumer code organisations or guarantee agencies to determine if the information given to households to inform their decision is adequate. This should include information about the measure / technology, its benefits, performance, maintenance, timeline for installation, warranty and any required behaviour change advice.

#### **Contract and information provision:**

- 1. Pre-survey to form part of the contract.** A pre-survey should form part of the contract to ensure that the client has seen the findings<sup>7</sup>. This should be included in any mandatory approval scheme established as part of Energy Efficient Scotland and its requirement raised awareness of amongst consumers.
- 2. Revision of performance models by MCS to prevent overstating.** Models used to estimate performance of renewables need to be updated to better reflect real-world scenarios. This should include the efficiency of the building fabric. In-situ models already exist for some technologies, for example the Domestic Annual Heat Pump System Efficiency (DAHPSSE) model developed by BRE<sup>8</sup>.

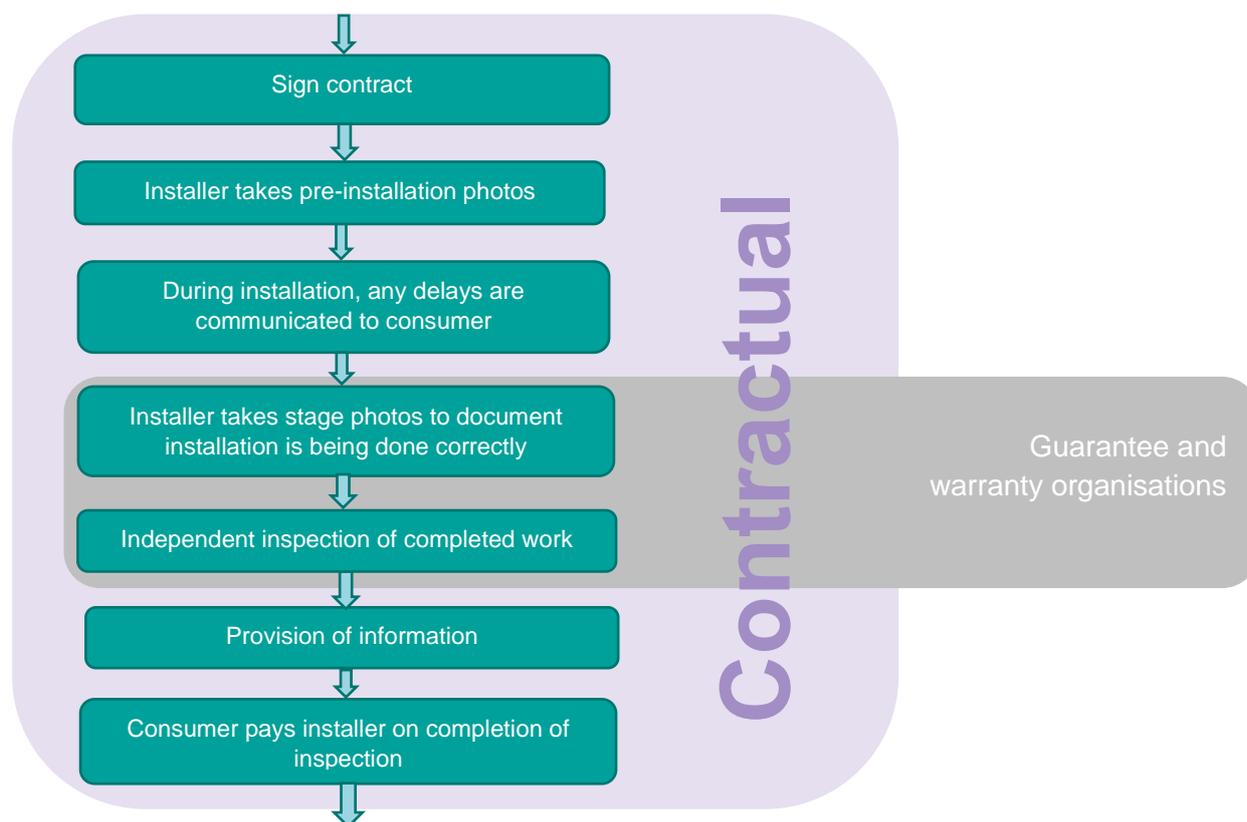
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<sup>7</sup> A requirement for the pre-installation survey to be conducted ahead of the contract was already in existence for most membership codes. However, evidence gathered through this research suggested that whilst this is the case for some membership organisations it is not a requirement of all installers, and member organisations do not always adhere to these practices. This could be improved through independent auditing of membership organisations and increased spot checks. However, it is important to remember that non-membership contractors would not be covered by these codes.

<sup>8</sup> [Domestic Annual Heat Pump System Efficiency \(DAHPSSE\)](#)

3. **Contract to detail required maintenance and likely costs.** In particular, the actions and costs required to maintain the performance of the measure in question and protect any associated warranty.
4. **Contract and pre-installation survey** uploaded to a centralised data warehouse<sup>9</sup>.

### 3.2 Contractual recommendations



Recommendations needed to form and ensure delivery of these provisions are as follows.

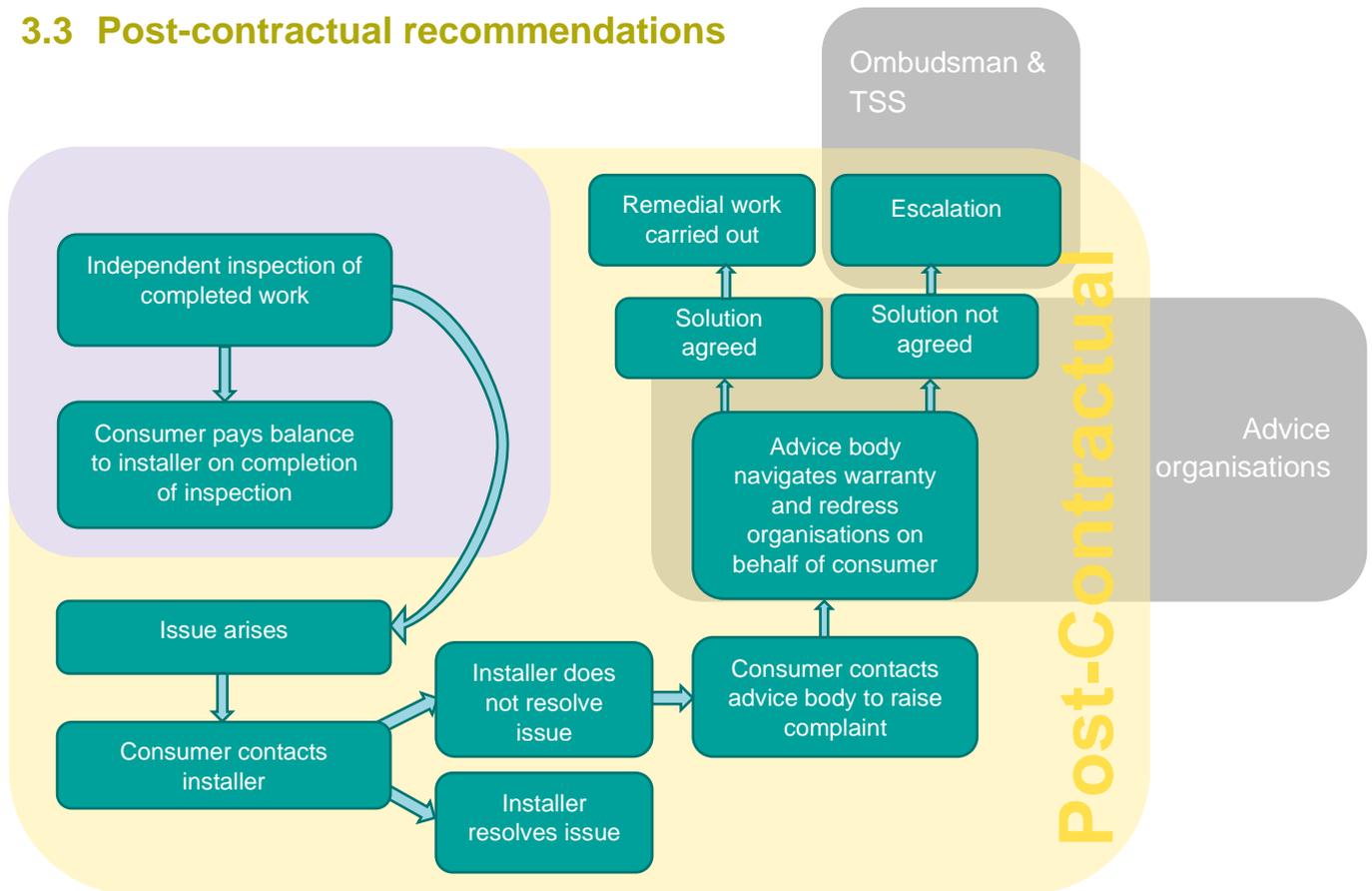
#### Installation process:

1. **Photographs taken at pre-installation and during installation** uploaded to the data warehouse to enable spot check audits of installation and to aid dispute resolution should issues arise.
2. **An increased number of independent quality assurance inspections** during installation and following completion of the measure. Consumer code and guarantee organisations should deliver regular spot-check technical audits of their member's installs.

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<sup>9</sup> Documents on any retrofit work should be uploaded to a centralised place. This should include: pre-install survey, contract, any relevant photos, any complaints lodged and details of resolution. This will need to be administered by an external organisation and training given to relevant parties. This should be made as accessible as possible with an app for use by installers.

### 3.3 Post-contractual recommendations



Recommendations needed to form and ensure delivery of these provisions are as follows.

#### Redress:

1. **Advice organisations offering standardised package of support.** The organisations forming the multi-agency advice group should be given additional funding by Scottish Government to support redress. As in the case of the advice stage (pre-contractual), the multi-agency group should develop a standardised set of advice to be offered to consumers, which is consistent no matter who they first contact.
2. **A measure-specific process map** should be produced by the multi-agency group. This would serve as a guidance tool to help advice bodies navigate consumers through the steps and various organisations involved in seeking redress.
3. **Referral network.** As in the case of the advice stage (pre-contractual), the advice organisations should use a referral network between advice groups and other relevant parties (i.e. guarantee organisations, Advice Direct Scotland, Trading Standards, ombudsman) to enable a more seamless process for consumers.
4. **Access to an industry-wide data warehouse to support redress.** Data on any retrofit work should be uploaded to a centralised place. This should include: pre-install survey, contract, any relevant photos, any complaints lodged and details of resolution. This will need to be administered by an external organisation and training

given to relevant parties. This should be made as accessible as possible with an app for use by installers.

5. **Escalation.** Should issues not be successfully resolved by guarantee and consumer code organisations (or the installer is not registered with these organisations), advice bodies should have a clear referral route to the relevant ombudsman and to Trading Standards Scotland. These organisations need to be given adequate funding to raise their profile and seek appropriate redress for effected consumers. A clear set of timescales and onward customer journey need to be given to the consumer and regular updates provided via the advice organisation.
6. **Regulation of complaint response and resolution.** Timelines for responses and resolutions should be clearly stated by code and guarantee organisations and communicated to the consumer at the point of the complaint.

#### **Regulation of code and guarantee orgs:**

1. **Independent audit of adherence to guidelines.** The accreditation organisations which the consumer code or guarantee organisations are members of (e.g. United Kingdom Accreditation Service (UKAS), British Board of Agrément (BBA) or Chartered Trading Standards Institute (CTSI)) should be funded by UK Government to deliver an annual audit of code and guarantee organisation to ensure that members are adhering to their guidelines.
2. **Audit of blacklisting practices.** The same independent organisations should check blacklisting practices and the frequency of which their membership lists are updated.

#### **Action against rogue traders:**

1. **Membership lists regularly updated** by code and guarantee organisations on a weekly basis.
2. **Action taken against those mis-using badges.** Guarantee and code organisations should notify Trading Standards Scotland if they are made aware of organisations mis-using badges.
3. **Introduction of a virtual card.** Use of a virtual identification card which can be shown to consumers as proof of membership<sup>10</sup>.
4. **Further sanctions following blacklisting.** Membership organisations should notify Trading Standards Scotland when installers are removed from their lists. They should then be investigated and fined should they be found to have caused consumer detriment.
5. **Phoenix prevention.** Greater consumer awareness of simple due diligence steps and support from an advice organisation would reduce the ability of detrimental phoenix organisations to freely trade. In addition, improved knowledge sharing

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<sup>10</sup> A solution which has recently been suggested to TrustMark by CIGA

between organisations would lead to greater enforcement; creating an environment where the practice of 'phoenixing' is significantly reduced.

**Monitoring:**

- 1. Data warehouse monitoring.** Having live information on the number and nature of complaints will enable monitoring to be carried out to identify both trends in complaints and the various solutions required to address them. This information should be made available to advice and redress support organisations and upheld complaints rates assigned to installers. In turn, this information should be made available to consumers when they are deciding which installer to use.

## 4. Research findings

### 4.1 Existing Provisions

#### Introduction

In a recent consultation<sup>11</sup>, Scottish Government described the current provision of consumer protection in Scotland as

*“a complex landscape, which sometimes makes it difficult for consumers to know where to turn and for consumer organisations to collaborate and share information.”*

A desk-based review of policy and existing consumer protection provisions was conducted, and the results used to populate a matrix (see appendices A-C) which maps out the protections provided for different renewable energy and energy efficiency measures at each stage of the customer journey. The matrix illustrates the multitude of legal provisions, membership bodies, consumer codes and advice organisations for each measure which contribute toward this complex landscape. Provisions for some of the measures / technologies were found to be considerably more robust than others. Throughout this report themes have been drawn to establish commonalities stemming from the gap analysis. It was not possible in the report to highlight each instance where respective schemes or code and guarantee organisations do or do not address gaps for each technology, instead this detail is available in the matrix (see appendices A-C).

#### Legislation

There are numerous pieces of UK legislation which protect consumers. Perhaps the most significant is the Consumer Rights Act 2015 (CRA), which sets out a framework to consolidate key consumer rights in one place. It was introduced to reform the previous piecemeal legislation, and address two key weaknesses in the UK consumer protection regime: uneven enforcement and excessively complex law<sup>12</sup>.

Despite the intention to consolidate consumer legislation, there are still several regulations and pieces of legislation that must be read in conjunction with the CRA to achieve a full picture of consumer rights.

#### Certification, guarantee and warranty schemes

In addition to these general legal provisions, consumer protection for the energy efficiency and renewable retrofit market is provided through a number of certification, guarantee and warranty schemes for both installers and products. In our research, we identified 12 such schemes, including two guarantee schemes and two installer certification schemes for the insulation industry, three schemes for glazing installers and three for renewable generation installers. Scottish Government also operate an approved certification scheme, similar to the Competent Persons Schemes operating in England and Wales. The certification system

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<sup>11</sup> Scottish Government (2018) [A consultation to establish a consumer body for Scotland](#)

<sup>12</sup> The University of East Anglia (2008) *Benchmarking the performance of the UK framework supporting consumer empowerment through comparison against relevant international comparator countries*

allows suitably qualified and experienced building professionals and tradesmen to self-certify that specified works comply with building regulations.

Consumers will often interact with multiple schemes for a single install. For example, for renewable technology, Microgeneration Certification Scheme (MCS) provides technical standards for both installers and products, but the MCS requires installers also hold membership to one of the following Chartered Trading Standards Institute (CTSI) approved consumer codes:

- Renewable Energy Consumer Code Consumer (RECC);
- The Home Insulation & Energy Systems Contractors Scheme (HIES); or
- The Glass and Glazing Federation (GGF).

MCS and RECC have also recently announced a new partnership whereby MCS certificates for solar PV, battery storage or wind installations will include RECC membership. The aim is to increase awareness for consumers and reduce costs for installers.

The consumer code organisations outline the required relationship between installers and consumers. As layers of protections are delivered by different organisations, it may be difficult for consumers to determine who to contact. This is described on the National Association of Professional Inspectors and Testers (NAPIT) website:

*“In principle the issues that consumers might have with MCS installers fall largely into technical areas (handled by the MCS Certification Body) and consumer care areas handled by the Consumer Codes. In practice some areas overlap.”*

During the interviews, stakeholders raised examples of guarantee and consumer code organisations who complete site inspections and audit installers. However, it was unclear if this would cover all installers in the energy efficiency and renewables sector (or just those members of the given schemes).

The consumer and guarantee organisations are themselves accredited with either CTSI or United Kingdom Accreditation Service. Or in the case of UKAS, some organisations are in turn accredited via British Board of Agrément (BBA) (who are UKAS accredited). These services require accredited organisations to meet a series of criteria, including regular internal audits, and are subjected to an initial surveillance visit. However, audits are not ongoing throughout the period of accreditation, which in the case of UKAS is four years.

Research commissioned by Citizens Advice in 2015<sup>13</sup> concluded that the wide range of quality assurance mechanisms, including Quality Marks, Codes of Practice, operating standards, guarantees and warranties created a “*highly convoluted landscape*” for consumers to navigate. The research found that gaps and loopholes in this complex consumer protection framework were compounded by an underlying lack of consumer knowledge and understanding. Since this report, new measures have been introduced to improve the provision of consumer protection. TrustMark, a UK government endorsed quality scheme, expanded its remit to cover the retrofit and energy efficiency sectors. This was in

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<sup>13</sup> Pye Tait (2015) [Research into quality assurance in energy efficiency and low carbon schemes in the domestic market](#)

response to the industry led Government-commissioned Each Home Counts review in 2016, which identified a requirement for an all-encompassing mark of quality for consumers to recognise and trust.

During the stakeholder interviews, participants were asked specifically about their opinion of the UK TrustMark<sup>14</sup>, or otherwise raised it themselves during discussions. Some concerns were raised relating to the Trustmark framework<sup>15</sup>. One said the framework is open to interpretation and the standards that suppliers must meet are too generic. Another stakeholder felt that the framework needed to be robust and consumer friendly; suggesting that the complaints procedure should lead to temporary suspension or removal of the suppliers from scheme as appropriate. It was also felt that Trustmark will only work (as a consumer protection measure), if the registered companies are fully investigated before they are permitted to display the Trustmark badge.

### Consumer advice and advocacy

There are multiple organisations which provide consumer advice and advocacy services specific to energy efficiency and renewables, such as Home Energy Scotland, Citizens Advice Bureaux, Energy Saving Trust, Which? and Energy Action Scotland. These organisations have an invaluable role in supporting consumers to decipher and navigate the information and protection mechanisms available to them, as has been highlighted by the Financial Conduct Authority (FCA) and Competition and Markets Authority (CMA)<sup>16</sup>:

*“The evaluation of past interventions demonstrates that it is often not enough simply to provide consumers with a surplus of information and expect them to solve everything alone. Where people are making complex, or difficult long-term decisions, we also need to ensure that consumers are properly supported and/or protected.”*

### Information sharing

One element proposed through the Each Homes Counts report was the use of a Data Warehouse to hold information about retrofit work in a centralised place. This has been developed, but only for those installers operating as part of TrustMark. Some of the stakeholders interviewed explained that the Data Warehouse would be useful as a place to find out about the installer and see what installations they had done. It was mentioned that this information sharing and the allowance of referrals by organisations would be very helpful to stakeholders in removing the onus for the consumer to contact another organisation. However, the issues of the complexities of data sharing were also raised. This included the need for proper management and administration of such a database, the training required to upskill the various users and the risk of data protection issues arising with multiple organisations accessing such a data set. At the stakeholder workshop, one of the guarantee

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<sup>14</sup> Stakeholders were asked about how a Scottish Quality Mark would work in practice with the UK TrustMark, the impacts of requiring TrustMark accreditation for publicly funded work (e.g. ECO3), and for their thoughts on the TrustMark central Information Hub.

<sup>15</sup> See ‘Information sharing’ section below, ‘Impact on funding’ in section 4.4, and ‘UK TrustMark – Information Hub’ in Section 4.5.2 for further feedback on Trustmark from stakeholders.

<sup>16</sup> Financial Conduct Authority and the Competition and Markets Authority (2018) [Helping people get a better deal: Learning lessons about consumer facing remedies](#)

organisations expressed concerns that Claims Management Companies could access the data and use it to exploit consumers.

Another stakeholder explained that it was particularly positive that the TrustMark Code of Practice includes information for installers on contracting and interacting with consumers. It was also felt that while the industry is set up for installers to follow the funding (e.g. Green Deal / ECO / HEEPS:ABS), protections like TrustMark would help stop issues (as found with Green Deal) from arising again. One stakeholder also said that having a requirement for installers to be TrustMark registered “*could only be positive*” for consumers.

### Mis-selling

Mis-selling in the renewable and energy efficiency industry can take many forms, including pressure-selling and misleading information relating to prices, performance calculations and return on investment. There is also evidence of consumers being mis-sold financial products and credit agreements by those selling renewable energy and energy efficiency products.<sup>17</sup>

As the industry matures, mis-selling now also occurs when consumers who have already invested in renewable or energy efficiency products are targeted by scammers offering unnecessary 'add-on' products, warranties, insurance and extra maintenance.

In England and Wales, The Misrepresentation Act 1967 protects consumers from false or fraudulent claims and allows consumers to claim damages. In Scotland this is addressed by section 10 of the Law Reform (Miscellaneous Provisions) (Scotland) Act 1985. The Scottish Law Commission<sup>18</sup> concludes that although these laws provide consumers with redress against traders selling goods or services following a misrepresentation, the remedies are not as clear as they should be:

*“Although we think that the policies behind the Acts are broadly correct, the Acts appear overly complex and difficult for consumers to use.”*

In practice, better protection from mis-selling is offered through legislation such as Consumer Protection from Unfair Trading Regulations 2008 and The Consumer Contracts (Information, Cancellation and Additional Charges) Regulations 2013. Importantly, the CRA changed the law in relation to pre-contract information. All verbal and written statements made by a company are now binding, if that information influenced a consumer’s decision to enter a contract.<sup>19</sup>

The provision of pre-contractual information is a central part of consumer codes such as RECC, HIES and GGF. These set out that installers must provide consumers with clear and helpful sales information and ensure that vulnerable consumers understand all aspects of the contract. Such consumer codes are only useful if consumers are aware of them and only

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<sup>17</sup> Citizens Advice Scotland (2018) [Bad Company: Finding solutions for the people ripped off by HELMS](#)

<sup>18</sup> The Law Commission and the Scottish Law Commission, *Consumer Redress for Misleading and Aggressive Practices*, 2012

<sup>19</sup> RECC (2016) [Small-scale renewable energy generation: the provision of performance information to consumers in the heat technology sector](#)

consider installers with membership to a code. Similarly, the consumer codes must have robust measures in place to ensure compliance.

RECC, for example, has a non-compliance panel which can impose sanctions on members including written warnings, periods of enhanced monitoring, financial payments, or termination of membership. HIES and GGF operate similar mechanisms.

In schemes such as HEEPS:ABS the provision of pre-contractual advice and assessment is decoupled from the recommendation of measures and installations. Assessors therefore have no vested interest in proposing certain products or measures due to an affiliation with a company. In other cases, the assessment and sale processes are often conducted simultaneously, and consumers must rely on consumer codes, such as those described above, to protect themselves from mis-selling.

### Successes

While shortfalls in existing provisions have been noted earlier, it was recognised that there were certain aspects of the existing provisions which stakeholders identified as working particularly well. It should be highlighted that these provisions are not practiced across the market but are enacted by certain code organisations or certain funding schemes. These practices included:

- A pre-installation survey with detailed photos taken of the property to help settle any disputes as and when they arise.
- Pre-notification system used by SWIGA to ensure that installers are suitably trained for the system they are installing. This requires the installer to declare when they are using a new technique so that the first few installs can be inspected.
- Installation: photos taken to document that installation is being carried out correctly. For example, SWIGA require stage photographs by all contractors and audit these at random.
- Accreditations: information on accredited / discredited installers being kept up to date, e.g. MCS online register is updated every week. Green Deal ORB (Oversight and Registration Body) cited as a poor example of this during stakeholder interviews.
- Redress: some guarantee organisations pay for remedial work upfront and claim money back from installer. The aim of this is to shorten the process and reduce the amount of time a consumer is living with a faulty system. However, the risks this entailed mean that many insurance-based guarantee providers do not offer this service.

## 4.2 Connections Between Services

As highlighted in the recent consultation on Consumer Scotland, there is a need for effective coordination across the consumer protection sector. Respondents to the consultation<sup>20</sup> suggested:

*“a single coordinating organisation offering a single point of entry to consumer protection, which would allow for accessibility to all, access to specialist agencies, consistency in available advice, better coordination across the sector and streamlining the landscape.”*

This echoes the recommendations from the Each Home Counts review<sup>21</sup> for a single scheme which covers all technologies with a single point of consumer contact.

### Advice and advocacy

An overriding theme from the stakeholder interviews was that the current consumer landscape is confusing. Phrases used to describe the current inter-relationships and how consumers navigate the landscape between protections included ‘confused’, ‘needs better co-ordination’, ‘not always clear’ / ‘unclear’ and ‘disjointed’. Conversely, two of the stakeholders (one from a body in direct contact with consumers and one who is not), felt that the path for consumers was clear, that consumers had relevant information, knew what to do if they needed support or to make a complaint. It is worth noting that this is secondary evidence and therefore not necessarily representative of consumer’s experience.

When asked what route consumers would take, it was suggested that they would contact:

- The Local Authority, then maybe the local CAB.
- The installer, and thereafter Home Energy Scotland.
- The installer, then the consumer code or certification body.
- Advice Direct Scotland, the installer, then an ombudsman.
- The installer, or the local authority, local CAB, their MSP / MP.

That these example routes of action from stakeholders are so varied suggests that the landscape is unclear, and that consumers may not know where to turn for advice and support. In addition, one stakeholder said that ideally complaints would be passed to local authority Trading Standards and then on to Trading Standards Scotland if it is a cross-border issue. However, evidence from the other stakeholders suggested that consumers may not know to do this, or that the processes are not in place for complaints to be passed on in this way.

Two bodies (Trading Standards and Energy Saving Trust) had previously wanted to set up a direct referral service for consumers who called Home Energy Scotland but despite agreement on both sides the mechanism was found to be too complicated.

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<sup>20</sup> Scottish Government (2018) [Analysis of responses to the Consultation on A Consumer Body for Scotland](#)

<sup>21</sup> Peter Bonfield (2016) [Each Home Counts: An Independent Review of Consumer Advice, Protection, Standards and Enforcement for Energy Efficiency and Renewable Energy](#)

## Auditing

As described in section 4.1, there is some collaboration between schemes such as MCS and the three CTSI-approved consumer codes (RECC, HIES and GGF). The relationship between schemes such as RECC and MCS is an interesting example of two schemes designed to link and support each other. As separate schemes, there is the potential for confusion for consumers. However, this separation also allows the schemes to hold each other to account.

Audits conducted by RECC in 2015 and 2016 revealed that a large number of MCS installers were providing consumers with misleading information on the performance of low carbon heating technologies.<sup>22</sup> RECC's research found that many MCS installers regarded the MCS standards relating to performance information as optional. Moreover, this crucial pre-contractual information on performance is not the subject of inspections carried out by the UKAS Certification Bodies, and so this non-compliance had not been addressed within the MCS scheme. This example highlights that even the most robust standards can only protect consumers where a vigorous audit and inspection system exists to detect non-compliance.

## Funded schemes and programmes

During the interviews, stakeholders expressed that the existing consumer protection framework needs to better integrate with the provisions set out in funded schemes such as ECO, HEEPS:ABS, the Green Deal and Warmer Homes Scotland. The extent to which existing provisions are integrated within such schemes differs. Again, this adds to the confusing landscape and can result in loopholes or gaps leaving consumers unprotected.

There have been recent developments to improve the integration of consumer protection provisions into ECO. Following a recent consultation, BEIS announced that all ECO3 installers must be TrustMark registered businesses and offer increased financial protection to consumers. Installers must also comply with PAS 2030: 2019 and PAS 2035: 2019.

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<sup>22</sup> RECC (2015) [Analysis of Performance Estimates for Heat Technologies](#)

### 4.3 Gaps in existing provisions

The following section highlights some of the consumer protection elements missing from the existing energy efficiency retrofit landscape. Some gaps are a result of poorly designed funded schemes, while others are weaknesses in the protection offered by the existing consumer protection bodies.

#### Awareness of Provisions

There is a gap in the consumer protection framework in relation to consumers' ability to undertake appropriate checks, or due diligence on installers. A 2015 report to Citizens Advice on the consumer experience of solar PV<sup>23</sup> found evidence that consumers do not check installer details with schemes but instead take it on trust with their installer that they are registered. The report also found that customers frequently obtain less than three quotes from installers.

During the interviews, the majority of stakeholders reported that consumers are lacking in knowledge about the measures or technologies that are being installed in their homes and the protections needed to avoid detriment. It was raised that vulnerable consumers are at greater risk of harm due to lack of information / knowledge. Some of the key points raised by stakeholders are as follows<sup>24</sup>:

- Consumer knowledge, and the provision of information to consumers, needs significant improvement before they become responsible for meeting Minimum Energy Efficiency Standards.
- The complicated landscape results in confusion about who all the different parties are, and where any information provided to the consumer has originated from.
- Installers not adequately explaining how consumers should use the technology, or how they should amend their behaviours (e.g. heating patterns etc.), or simply leaving a leaflet and not fully explaining the content.
- Poor quality and misleading information provided to consumers (e.g. overstated estimated performance of renewable technologies).
- Instances of consumers not knowing what technology has been installed in their home.
- Consumers not knowing they should (or not being able to) undertake due diligence on cold-calling or door-stepping installers; creating a market in which rogue installers can operate.
- Some awareness raising campaigns might not be reaching the consumers that are most vulnerable (due to the digital focus of campaigns) and the extent that consumers retain the information that they are provided with.

#### Mis-selling

The reviewed literature provides examples where the existing consumer protection framework has not been well-integrated with government schemes such as the Green Deal,

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<sup>23</sup> Future Climate and Purple Market Research (2015) [A review of consumer experience of solar PV systems](#)

<sup>24</sup> Each point was raised by one or two stakeholders

leaving consumers exposed to harm. An investigation by CAS into the Green Deal provider HELMS illustrates the multitude of ways in which consumers were mistreated under the Green Deal<sup>25</sup>. The report reveals significant and widespread problems with cold-calling scams, mis-selling and pressure-selling tactics which exploited consumer confusion about the nature of the scheme. Due to the complexity of the scheme design, many consumers have been unable to seek redress under the existing consumer protection framework. These findings are reflected in research conducted at Abertay University in 2016, which concluded that the designers of the Green Deal scheme did not fully consider the customer journey, and the direct interaction of consumers with the SME supply chain in their role as scheme delivery agents<sup>26</sup>.

During the pre-contractual stage of the customer journey, there are clear gaps in the existing provisions designed to protect consumers from mis-selling. The reviewed literature provides evidence of both intentional and unintentional mis-selling of renewable energy and energy efficiency products. Examples include the sale of technologies which are inappropriate for the building they are being installed in, such as cavity wall insulation in buildings exposed to wind driven rain<sup>27</sup>, or air source heat pumps in poorly insulated properties.

Problems with intentional mis-selling can arise where there is no separation of the assessment of a property from the sales process, as was prevalent with Green Deal assessors. There is evidence of similar issues within schemes such as ECO and MCS, with organisations undertaking multiple roles in both the assessment and installation phases of the consumer journey<sup>28</sup>. Without a separation of these duties there is no guarantee that the products recommended are those which are most suitable for the consumer.

The issue of unintentional mis-selling is a consequence of insufficient training and unclear guidelines for installers and is compounded by a lack of comprehensive pre-installation surveys. The absence of a pre-installation survey can cause further problems for consumers in later stages of the customer journey. It can result in a stalemate if problems arise after the installation of energy efficiency or renewable energy measures, as without a pre-installation survey it is impossible to establish whether problems are the result of inappropriate installations. This leaves consumers unprotected, as without conclusive evidence of the cause of problems, guarantee providers are unwilling to pay out<sup>29</sup>.

Stakeholder interviewees recounted customers experiences of mis-selling. Concerns included hard sales techniques, pressure selling and not allowing a cool off period. Mis-selling was especially noted surrounding measures such as solar PV panels, inverters and heat pumps and included:

- Technology installed in the property could not achieve the performance stated in marketing and pre-contractual materials, therefore expectations of savings / income were not realistic, or at least at the top end of reasonable estimates.

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<sup>25</sup> Citizens Advice Scotland (2018) [Bad Company: Finding solutions for the people ripped off by HELMS](#)

<sup>26</sup> Abertay University (2016) [A network approach to overcoming barriers to market engagement for SMEs in energy efficiency initiatives such as the Green Deal](#)

<sup>27</sup> BRE (2017) [Post Installation Performance of Cavity Wall & External Wall Insulation](#)

<sup>28</sup> Pye Tait (2015) [Research into quality assurance in energy efficiency and low carbon schemes in the domestic market](#)

<sup>29</sup> BRE (2017) [Post Installation Performance of Cavity Wall & External Wall Insulation](#)

- The technology is not appropriate for the property, or if the property is not in a suitable state to receive the measures.
- Where a consumer does not get the measure, technology, service or outcomes they anticipated, or were told by an installer they would receive.

### Cold calling / Door-stepping

During the interviews, three stakeholders raised cold-calling or door-stepping as a consumer protection issue that was not currently being addressed. As explained above, under 'awareness of provisions', there were concerns that consumers who are sold products by door-stepping or cold-calling are more at risk of harm. They might not do as much due diligence on installers, or know how or where to check for quality, or for alternative installers.

One stakeholder explained that there was a big difference in the behaviour and quality of an installer who would cold-call or doorstep, compared to those who are certified or trade body members and act responsibly.

The intelligence team at Trading Standards Scotland are responsible for procurement and distribution of call blocking devices, one stakeholder recounted that in 2018, 47% of blocked calls were in relation to energy efficiency products. They called for a three-strikes policy for installers that cold-call (especially telephone numbers listed on the Telephone Preference Service).

### Pre-contractual surveys

Research by RECC into the performance information given to consumers at the pre-contractual stage concluded that consumer harm was being caused due to the unclear wording of MCS standards MIS 3001 (Solar Thermal), MIS 3004 (Biomass) and MIS 3005 (heat pumps)<sup>30</sup>. The standards were not explicit as to when consumers should be provided with performance estimate information, resulting in consumers signing contract agreements without knowledge of the performance of the heating system.

*“The evidence from RECC’s research set out in this report shows that many customers and potential customers are receiving confusing, misleading and potentially damaging information from small-scale renewable energy generation installers. There is evidence this is causing consumer harm.”*

In the stakeholder interviews, one stakeholder suggested that the requirement to have a contract between the installer and consumer is not sufficient; explaining that the content of the contract is crucial.

Four interviewees raised concerns about the performance estimates provided to consumers being inaccurate<sup>31</sup>. These included:

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<sup>30</sup> RECC (2015) [Analysis of Performance Estimates for Heat Technologies](#)

<sup>31</sup> These points were all raised by one stakeholder, except the first bullet which was mentioned by two stakeholders

- Use of EPC ratings to estimate financial savings means information provided to consumers is not accurate. A performance gap (between design and install) can result in consumers not saving as much money as they anticipated (or none at all).
- One interviewee has been analysing performance data for ASHPs since 2015. *“I started to look at performance estimates in a lot of detail because I couldn’t believe what I was looking at in some of the examples that we were seeing in audit... I was shocked at what we were seeing, there was obvious exaggeration of performance and there was very little compliance with the MCS Standard.”*
- Performance estimates (SCOP – Seasonal Coefficient of Performance) are based on a lab-test and not on how the technology would actually perform in a real-world situation. Consumers are often told that the SCOP is 3.5 but in fact it is usually less than 3.
- The same interviewee also raised concerns about the performance estimates on biomass installations. The figure often quoted (up to 92% efficiency) is based on combustion efficiency and not whole system efficiency. This causes issues for consumers who base running and fuel costs on this figure.
- The main problem with Green Deal (according to one interviewee) was that consumers were mis-sold based on overestimated performance estimates.
- One stakeholder representing consumers explained their experience of heat batteries not performing as efficiently as expected. There had been a range of teething issues (repairs / leaks / equipment not working as it is supposed to), and felt that customers were not necessarily paying any more, but definitely not paying any less for their heating.

### Auditing of membership schemes

During the stakeholder interviews, three stakeholders explained that any kind of membership or quality assurance scheme is only as good as the policing or auditing of members. Concerns were raised that in some cases installers can ‘tick boxes’ to join a scheme, but with no further checking, there is no way of ensuring good quality work. Additionally, when sub-contractors deliver all or part of an installation, they should be subject to the same checks.

It was also felt that current levels of independent inspections are too low (QA inspection rates are set out in funder requirements, e.g. ECO). Two stakeholders called for a greater number of inspections to be required. Independent on-site inspections were stated as crucial by one stakeholder, at pre-, during and post-install stages.

*“That independent check makes all the difference, and by independent... I mean that the client actually hires somebody, or the client does the work themselves. The role of the CoW [Clerk of Works] in ensuring that consumers are protected is key.”*

One stakeholder mentioned that tenants would particularly appreciate an independent / external agency delivering checks on quality.

Third party inspections are required to help prevent technical issues, such as the following, impacting on the consumer:

- An ASHP installation in an off-grid property which looked like it had no insulation was viewed by one stakeholder; they were of the opinion that this was unlikely to be an isolated case.
- Cavity wall insulation failure common; one stakeholder anecdotally cited an inspection of 300 properties, which showed a 68% failure rate.
- Mastic failure (usually six or seven years after install) is a common issue (cited by one stakeholder).
- Brexit is causing problems with retaining skilled European on-site workforce, who have been leaving the UK. One stakeholder said that as a result, on-site workers are now less skilled overall, which increases the chance of low-quality work or technical issues arising.

One of the stakeholders interviewed raised a concern that auditing is too focused on technical checks and not enough on overall audits which would cover consumer / contractual issues too.

*“What is consistently forgotten... is that it’s possible to have a technical perfect install but it be a financial disaster for the customer.”*

Regardless, interviewees felt that auditing and policing needs proper resource behind it and the pool of independent inspectors needs to be increased.

Independent inspectors delivering quality assurance checks should themselves be subject to auditing. Questions were raised about whether anyone is responsible for checking that the audits take place and the extent to which they are independent (i.e. not on installer’s payroll) and whether the requirement should be placed on the funder or the client to ensure appropriate checking is undertaken.

The stakeholder interviews highlighted that there is a lack of independent checks throughout the installation process (three interviewees raised this as an issue), including:

- On the BBA promoted competent persons scheme;
- On-site (pre-, during, and post-install), including to confirm that the building is in good enough condition to receive the proposed measures; and
- On installers (e.g. auditing to ensure they are not just ‘ticking boxes’ required by schemes but actually delivering good quality work).

Two stakeholders raised concerns that if auditing is mandatory for all publicly funded work, then does it create a two-tier system where self-funded consumers are at a greater risk of harm? Stakeholder interviewees felt that self-funding consumers were felt to be at greater risk of harm as installers for funded schemes are subject to greater scrutiny than those in the self-funding market (raised by one stakeholder).

## Sanctions

As outlined in section 4.1, membership bodies such as consumer codes can sanction member organisations for non-compliance. However, based on the codes reviewed for this research, the most severe sanction is generally termination of membership. This means that non-compliant organisations can continue trading, and there is nothing to prevent them

applying for certification through another scheme. In addition, research commissioned by Citizens Advice in 2015<sup>32</sup> highlights that once certification has been removed from an organisation, there is little that the certification body can do to ensure redress for the consumer.

During the stakeholder interviews, two stakeholders raised that failure of inspections, should come with appropriate sanctions for installers that do not meet requirements, or who receive serious numbers of complaints. These sanctions could be revoking of membership, or criminal charges.

## Redress

At the post-contractual stage of the consumer journey, a recurring theme identified in the reviewed literature is the length and complexity of the complaints and redress process for consumers. For example, the research by CAS evidences the complaints process for HELMS customers to be long and drawn out, with several consumers still pursuing complaints about measures installed over four years ago. This is reflected in research undertaken by Cavity Wall Insulation Guarantee Agency (CIGA), where 69% of those responding to an online survey expressed that the customer journey was not sufficiently simple and straightforward<sup>33</sup>.

CIGA also identified that consumers have great difficulty when trying to find out who installed or insured an installation. There is currently no mechanism in place for individual consumers to trace the identity of the company who undertook work at their property, or the identity of any guarantee provider, of which there are now a number.

During the stakeholder interviews, problems with the current complaints process were identified by four interviewees. In particular, stakeholders raised the need for the complaints process to be faster to process and easier to navigate. Specific issues were as follows:

- As noted above, there is a lack of knowledge about how and where to complain, and a lack of independent advice to help consumers.
- The process is too complicated with too many organisations involved.
- Different bodies cannot refer consumers with complaints to other relevant organisations; either a single organisation for dealing with all complaints, or data sharing and referral process between relevant organisations is required.
- Telephone numbers to lodge complaints are not always freephone which can be a barrier to lodging a complaint in the first place.
- The time taken to escalate and resolve complaints and for consumers to get redress is far too long. Consumers may have to wait without heating (for example) or continue to pay unexpected costs while waiting for complaints to be resolved.
- Communication from installers once a complaint is made can also be lacking.
- A lack of redress even if complaints are upheld.
- Companies who receive a lot of complaints seem to still be able to trade.

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<sup>32</sup> Pye Tait (2015) [Research into quality assurance in energy efficiency and low carbon schemes in the domestic market](#)

<sup>33</sup> CIGA (2015) [Cavity wall insulation complaints - a review of CIGA complaints handling](#)

- One stakeholder noted anecdotal evidence of consumers being blamed for problems by the installer if they lodge a complaint.

Three stakeholders called for mandatory or increased use of Alternative Dispute Resolution (ADR); in particular it was felt that a process for independent escalation was needed.

## 4.4 Issues Arising

### Consumer detriment

The reviewed literature provides evidence of the implications that these gaps in the consumer protection framework have for consumers. The most prevalent form of consumer detriment is financial loss or debt. The majority of these cases are a result of a lack of integration of the Government-funded Green Deal scheme into existing consumer protection provisions<sup>34</sup>.

Research by CAS into the Green Deal supplier HELMS<sup>35</sup> provides evidence of consumers experiencing debt and losing life savings. The report provides numerous examples where consumers' energy bills have increased after the installation of renewable technologies such as solar PV. This was a result of two issues, including customers unknowingly signing away their rights to their Feed in Tariff (FIT) payments and unexpectedly facing Green Deal charges on their energy bills as the result of credit agreements which they had unknowingly signed up to. The average daily charge was 98p which equates to roughly £29 per month.

The report also provides evidence of consumers paying to fix improper installations and repair damage to their property caused by installers. In some of the more extreme cases, there was evidence of some consumers being unable to sell or insure their homes, as consumers had not been advised that they required building warrants for installations.

East Ayrshire Citizens Advice Bureau undertook a local impact assessment<sup>36</sup> with HELMS customers in their area. The assessment found that almost half of the clients they spoke to had experienced severe symptoms of anxiety and over half of the respondents had suffered with stress as a result of taking out a Green Deal Plan with HELMS.

The reviewed literature also provided ample evidence of the unintended consequences of energy efficiency retrofits. Research by BRE into the post-installation performance of CWI and EWI found evidence of mould, decay, electrical hazards, increased levels of respiratory illness and properties becoming more difficult to heat due to wet walls.

Due to the long and drawn-out complaints and resolution process discussed above, consumers are left with unusable, ineffective or even dangerous systems whilst accumulating debt, in many cases for several years. During the interviews, one stakeholder highlighted the consumer experience where once a complaint is made to an installer, they could be waiting for a response for maybe a month. This means a long wait with either a system that does not work (e.g. heating), or with a system that is not working properly and is costing a lot of money to run.

Additionally, both CIGA<sup>37</sup> and CAS have found evidence of installers and claims management companies (CMC) specifically targeting vulnerable householders. CMCs can

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<sup>34</sup> *Green Deal Plans did not fall within the jurisdiction of the bodies that provide existing protections; instead it was the responsibility of the Green Deal Oversight and Registration Body (GD-ORB) to vet the companies who performed work under the Green Deal*

<sup>35</sup> *Citizens Advice Scotland (2018) [Bad Company](#)*

<sup>36</sup> *East Ayrshire Citizens Advice Bureau (2018) [Deal or No Deal](#)*

<sup>37</sup> *CIGA (2019) [Annual Review](#)*

encourage the householders to put forward a claim and if successful large amounts of the remuneration are claimed by the CMC.

In relation to the standard of redress provided by current protections, one of the interviewed stakeholders shared anecdotal evidence of an instance where the guarantee provider sided with the installer over a failed CWI installation. The installer was made to extract the CWI but not refill the cavity, leaving the consumer without insulation. The guarantee was not revoked either (despite their being no insulation to guarantee) and therefore the consumer was not eligible for further publicly funded insulation measures.

Stakeholder interviews recounted similar experiences of consumer detriment. In relation to debt and fuel poverty there were particular experiences that had left interviewees needing further support such as benefit checks and access to money advice services.

- Air Source Heat Pump (ASHP) scheme related: one consumer was paying £150/week into a pre-payment meter; some consumers are switching off the ASHP instead of paying to run it; many consumers are on the wrong tariff, or have the wrong type of meter.
- Biomass related: consumers budgeting for fuel costs based on overestimated performance and actual fuel / running costs being considerably higher.
- Credit issues: lots of measures being installed on credit, despite 0% Government-backed loans being available in Scotland. One installer audited had recently completed 300+ installs, all on credit with 4% interest.
- Loss of deposit if installer is rogue or goes out of business before work begins.

Three stakeholders also raised experiences of unanticipated high running or fuel costs resulting from:

- Incorrect, misleading or overestimated performance estimates resulting in higher than anticipated running costs.
- Consumer misunderstandings where assignment of rights (AOR) is adopted. If an investor purchases the technology and recoups their investment through RHI payments, the consumer might not be aware that they will not receive the RHI and may not have budgeted accordingly.
- Faulty technology causing running costs to be higher than designed.
- A performance gap between design and installed measures can result in lesser savings (or no savings at all) due to higher than anticipated running costs.

*“Blame is placed on consumers use of the product... an awful lot of emphasis placed on ...making sure the consumer uses the [technology] correctly in order to achieve the best performance, and that’s all fine, but I think more emphasis should be placed on realistic performance forecasting, in the first place, rather than placing the responsibility of achieving higher efficiency on the consumer... Often the consumer is blamed for the lack of performance... the first thing the installer will say is well you’re not using it correctly.”*

The technology with the most complaints, as seen by one organisation, was solar PV, followed by ASHP; but they felt that with the targets to install huge numbers of ASHP, the

number of complaints was only going to increase if there is no improvement in standards. Further to this, one guarantee body, found a 3-4% complaint rate about ASHPs; this will not include complaints that were made directly to the installer (and resolved by them).

### **Impact on install costs**

During the interviews, stakeholders expressed concerns that achieving compliance with the TrustMark would significantly (possibly double) the cost of retrofit work due to increased training needs and additional detailing requirements, plus the cost of fees paid to TrustMark for membership and lodging installations.

A number of concerns were raised about the impact on consumers, of public funded work requiring higher installer standards than self-funded work:

- A two-tier system where those installers that do not want to, or cannot meet, TrustMark requirements are only doing self-funded installs.
- A risk that the number of publicly funded installations will reduce due to the additional costs of installing under TrustMark, and a subsequent reduction in the number of compliant installers.
- Checks required to ensure umbrella companies do not achieve TrustMark compliance, but that installations are actually undertaken by unaccredited sub-contractors.

## 4.5 Proposed Provisions

### 4.5.1 Literature Review

A number of consumer protection provisions have already been proposed in order to improve protection at all stages of the customer journey. These are outlined below, and stakeholder perceptions of these provisions are detailed in section 4.5.2.

#### Pre-contractual Stage

The Each Home Counts Review<sup>38</sup> makes several key recommendations to protect consumers in the pre-contractual stage of the customer journey. At the heart of the Review findings is a recommendation to establish a quality mark for the domestic retrofit sector, and it has since been announced this will be delivered through TrustMark. The review proposed a holistic approach to retrofits, where each project involves a whole building design stage. This is intended to prevent individual aspects of retrofits being considered in isolation which can lead to unintended consequences in overall building performance, and also prevent the mis-selling of inappropriate measures.

The review also makes several recommendations around consumer awareness, including the use of trigger points and messaging focussed on the benefits of energy efficiency and renewable energy measures for individual consumers. Scottish Government's Quality Assurance SLWG<sup>39</sup> also recommended an awareness raising campaign, as well as market research to identify which messaging will resonate with customers.

Also relating to mis-selling, RECC have made a series of recommendations around pre-contract information on the performance of heat technologies. RECC proposes that clearer performance information is provided to consumers, and that compliance surrounding the calculation of performance figures is audited more closely. It is also proposed that MCS and RECC develop formal consumer guides which give customers better information about the performance forecasts they receive. These recommendations are designed to mitigate the issue of overstating the performance of renewable technologies, resulting in exaggerated payback calculations.

In the context of internal and external wall insulation, BRE have recommended that pre-contractual information from installers must also include guidance on maintenance to help prevent system failures<sup>40</sup>.

Finally, the working group on consumer and competition policy have made recommendations to Scottish Government regarding the role of Consumer Scotland. Although not specific to the retrofit market, the recommendations echo those of the Each Home Counts Review in terms of creating a single portal for consumer advice, for all stages of the consumer journey.

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<sup>38</sup> Peter Bonfield (2016) [Each Home Counts Review](#)

<sup>39</sup> Quality Assurance Short Life Working Group (2019) [Recommendations Report](#)

<sup>40</sup> BRE (2017) [Post Installation Performance of Cavity Wall & External Wall Insulation](#)

## Contractual stage

Recommendations have been made by several bodies around the skills and training of installers. The Each Home Counts Review proposes training on home energy use and the interaction between different energy efficiency and renewable energy measures, as well as training to embed core knowledge such as basic building physics and consumer interaction. BRE also recommend training around surveying building condition, and the principles of condensation and moisture movement in structures.

In terms of enforcement and compliance, the Each Home Counts review recommends an audit regime which requires higher levels of technical monitoring of installations. BRE have also recommended more in-situ testing, rather than relying on “unrealistic lab results”<sup>41</sup>. Information sharing is a key tenet of all the recommendations in the Each Home Counts Review, and this applies to auditing and monitoring, which the Review states should be co-ordinated at the national level. The review also proposes sharing information on the quality of assessors, designers and installers to in order to identify and penalise poor practice.

## Post-contractual stage

Most of the recommendations from the reviewed literature focus on simplification of the complaints and redress process for consumers. Each Home Counts proposes a ‘Single Promise Guarantee’ as the route for all consumer complaints including product, design and installation. Again, information sharing has been flagged as a key enabler for an effective complaints process. Both the Quality Assurance SLWG and the Working Group on consumer and competition policy recommend that key agencies in Scotland collaborate to monitor the frequency and nature of complaints and identify non-compliant companies.

### 4.5.2 Stakeholder Feedback

Stakeholders were asked about proposed consumer protection provisions in the interviews. The questions asked and topics covered were chosen to suit the stakeholder’s known area of expertise and knowledge.

#### UK TrustMark – Information Hub

The Information Hub was proposed as part of the Each Home Counts report and incorporated into TrustMark provides information to consumers undertaking energy efficiency improvements.

It should be noted that there was some confusion between the Data Warehouse (which holds documents about completed work) and the Information Hub amongst stakeholders. In some cases, the proposals needed to be explained in order to obtain feedback.

Five stakeholders mentioned the Data Warehouse during wider discussions about TrustMark, or when asked about the Information Hub.

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<sup>41</sup> BRE (2017) [Post Installation Performance of Cavity Wall & External Wall Insulation](#) pg 49

Four stakeholders had a good understanding of the information offered through the Information Hub. Two stakeholders queried whether in Scotland this could be a duplication of the service Home Energy Scotland provide. However, one acknowledged that it is good to have this information in one place.

Some of the stakeholders felt that an information hub is needed as there is not a single place of trusted (accurate, consistent) advice for both the consumer and the installer.

*“The bottom line is that it is really important, that there is independent, impartial, verified, accurate information available in one place.”*

Another stakeholder commented that this would be an improvement on the existing BEIS funded Simple Energy Advice Online Tool which is too high-level and will not be suitable for all users.

Two potential issues were raised which included the challenge of keeping the Information Hub up to date as technology, regulations and tariffs changed. In addition, it was highlighted that without sufficient promotion, people would not know that the Information Hub existed.

### Scottish Quality Mark

Six stakeholders had feedback on the proposed Scottish Quality Mark. It was felt that a single, well-publicised Quality Mark would help reduce consumer confusion and give consumers confidence that they are getting a quality service. However, there is a risk of confusion (particularly in the Borders area) if there is a Scottish Quality Mark as well as a UK-wide TrustMark for installers, and it is unclear how a Scottish Quality Mark would interact with the TrustMark.

*“I think anything that’s going to improve the quality ... of industry interaction with consumers, or give consumers confidence that they are getting the best service ... and ensures people can resolve problems when they have problems, is going to be a good thing.”*

The compliance requirements for the Scottish Quality Mark have to go above and beyond what is already in place, and the Scottish Quality Mark will only be successful if there is appropriate investigation / auditing / policing of the installers who display the mark. One stakeholder, however also said there would be no way to legislate / manage the ‘real rogues’ and ‘chancers’, and that any policing should be balanced with the right to rehabilitation for installers who risk losing their livelihoods.

A Scottish Quality Mark would require a large pool of compliant installers, this would take work, but would ultimately be of benefit (particularly to remote consumers where there is a lack of installers, especially those that are certified).

It was suggested that a Scottish Quality Mark could provide competition to TrustMark, but that the two should use the same standards (e.g. PAS2035), otherwise it would be too challenging for installers:

*“At the installer level it would be good to just have one standard to work to... I think it is perfectly ok to have [a Scottish] Quality Mark but that Quality Mark should in my view follow PAS2035 simply to avoid confusing the industry with too many options.”*

An alternative option would be for Scottish Government to gather feedback on the UK-wide TrustMark during the transition phase (up to July 2021) to have the TrustMark meet the requirements of the Scottish market.

### Consumer Scotland

Four interviewees were asked about Consumer Scotland. Two of them had not heard of it but were able to comment once the provision was explained to them.

One stakeholder felt that more localised knowledge of Scottish consumers and consumer issues would be positive (especially rural / remote concerns).

Stakeholders felt that any new consumer body would need enforcement powers, otherwise it will have very little impact on 'bad' installers.

One explained that there would be potential overlap with CAS / CABs and that this relationship will be crucial.

*“There will be territorial issues, because of the fact that you are bringing in a new body but not at the same time redefining completely the role of CAS. So, I think that it will be difficult to avoid [overlap / duplication].”*

One stakeholder felt that this relationship would work best if Consumer Scotland had a data gathering / strategic analysis role, while CAS continued to deliver 'bottom-up' advocacy work.

### Installers delivering behaviour change advice

Four of the ten stakeholders were asked about the requirement for installations under Energy Efficient Scotland to include advice for consumers on optimising the performance of their home and any required behaviour change.

Behaviour change advice is vital, not just for the consumer but to ensure projected carbon savings are actually met. One stakeholder had anecdotal evidence of an external wall insulation recipient who was very happy with his insulation and was so warm he had to open all the windows. No-one had explained that he should adjust his heating controls. As the success of Government funding schemes is measured on the number of “measures” installed, behaviour change is critical to ensure the success is genuine.

*“I think that [behaviour change advice] is absolutely vital. You are changing the technical nature of the way that somebody’s home works...I think it would be disingenuous to say... these are all the theoretical savings we are getting from these types of programmes without [behaviour change]...”*

Two stakeholders said that consumers need to understand what the implications are of an installation on their property and lifestyle. There were also discussions about who should deliver the required advice:

- If it fell to the installer, the quality and consistency of advice would need to be considered. Installers are on the premises so it would make sense (logistically) for them to deliver advice, but they could potentially be too technical.

- It works when there is an advice organisation involved to deliver this support.
- Potentially customer relations officers hired by installers could take on this role.

One stakeholder added that PAS2035 has a requirement for installers to explain and talk through the Homeowners pack (rather than just leaving it in the property), thus a precedent for this advice service happening elsewhere.

## 5. Summary findings

### Existing provisions

The existing consumer protection landscape is complex and can be challenging to navigate as a consumer:

- There are numerous pieces of legislation which cover consumer protection issues, including the Consumer Rights Act 2015.
- Many certification, guarantee and warranty bodies exist (12 identified in this research); one installation could be covered by multiple bodies.
- Various organisations offer consumer advice and advocacy.
- The lack of information sharing between bodies can add to consumer detriment.
- Legislation, independent pre-contractual information, contracts and sanctions are all in place to prevent mis-selling, but this still occurs.

### Connections between services

The consumer retrofit market currently lacks single point of contact for consumer protection. This has resulted in widespread confusion about how the different bodies in the landscape interact:

- It is unclear where consumers would go to find support.
- A lack of referrals between organisations makes the current customer journey more convoluted.
- Consumers may be confused about what provisions apply when work is publicly funded.

However, good practice does exist, with guarantee and code bodies auditing each other, and offering co-membership of schemes for installers.

### Gaps in existing provisions

A large number of gaps in the existing consumer protection provisions were identified through this research. The key gaps are as follows:

- **Awareness of provisions** – consumers lack awareness of the provisions that exist, lack information about the measures and technologies being installed in their homes and how to navigate the consumer protection landscape.
- **Mis-selling** is prevalent both intentional (due to lack of independent advice, poor installer behaviour) and unintentional (due to lack of training and guidance).
- **Cold calling / door-stepping** – consumers contacted via these means do not have sufficient information or awareness to support them in making an informed decision.
- **Pre-contractual survey** – guidance on when to undertake the pre-contractual survey is unclear for installers; consumers are also receiving inaccurate performance estimates at this pre-contractual stage.
- **Auditing of membership schemes** – consumers lack the awareness and knowledge needed to undertake appropriate due diligence on installers. There is also

a lack of independent auditing, and auditing of non-technical (e.g. contractual) aspects.

- **Sanctions** – limited information sharing between bodies can mean that sanctions (e.g. revoking membership) are ineffective, as rogue installers can just re-apply to an alternative scheme.
- **Redress** – due to the complexity of the landscape, consumers struggle to seek redress when it is needed.

### Issues arising

The impact of the gaps identified in the existing provisions are wide ranging, resulting in a range of consumer detriment arising. The impacts on consumers included:

- Debt or financial loss due to increase in energy bills, credit charges and loss of financial incentives.
- Consumers being unable to sell or insure their homes.
- Unintended consequences such as damp, mould, electrical hazards.
- Consumers living with unusable, ineffective or dangerous systems.
- Loss of deposit to rogue installers, or as a result of companies going bust.

In addition, it was raised that the introduction of some of the consumer protection provisions proposed as part of funded schemes, might result in increased costs; and fewer householders receiving support as a result. These schemes may also cause a two-tier system where those installers that do not want to, or cannot meet requirements, are only doing self-funded installs.

### Proposed provisions

Amongst stakeholders there was uncertainty surrounding the proposed measures, in particular the Information Hub which has already been integrated into TrustMark and the Scottish Quality Mark. Stakeholders were unsure how both aspects would incorporate into the existing landscape and whether they would risk duplicating existing provisions and services which are already available in Scotland.

Awareness of the advice body Consumer Scotland were low amongst stakeholders. Some felt that if the role was one of data gathering and strategic analysis; this increased knowledge would be welcomed. Potential issues raised included the relationship with existing organisations such as CAS and the need for robust powers.

Stakeholders felt that behaviour change advice was vital but questioned whether this should be delivered by the installer or another organisation. This forms an element of PAS 2035, setting a precedent for this to be delivered as part of other schemes.



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# Consumer protection in the domestic energy efficiency and renewable retrofit market

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## Appendices

March 2020



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## Appendix A: Matrix of Pre-contractual Stage Provisions

	General Advice			Selling			Surveying		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
<b>Loft Insulation</b>	<p>Consumer understanding of whether this product is suitable for their home</p> <p>Suitability of warm loft, cool loft or room in roof options</p> <p>Advice for insulating flat roofs (normally external insulation)</p>	<p>Independent advice from HES - Online Home Energy Check tool, and home visits for those who find it difficult to use the phone EST information online</p>		<p>DIY: use of poor-quality products / inadequate materials</p> <p>Professional installation: mis-selling of inappropriate products or using hard sales tactics</p>	<p>For DIY products: Energy Saving Trust logo for quality-controlled products which comply with building regulations</p> <p>NIA Code of Professional Practice outlines marketing, contract and pricing requirements</p>	<p>Installer operating outside of NIA</p>	<p>Inadequate or no survey carried out</p> <p>Roof defects not identified - roof must be dry and in good condition</p>		<p>NIA Code does not require surveys</p>
<b>External and Internal Wall Insulation</b>	<p>Consumer understanding of whether this product is suitable for their home</p>	<p>HES EST</p>		<p>Mis-selling of EWI when not appropriate for a property</p> <p>Using hard sales tactics</p> <p>Overstating savings</p>	<p>NIA Code of Professional Practice outlines marketing, contract and pricing requirements</p>	<p>Installer operating outside of NIA</p>	<p><b>External wall insulation:</b> Improper surveying for obstructions</p> <p>Essential that thorough preliminary surveys are undertaken to avoid thermal bridging around windows, doors etc.</p> <p><b>Internal wall insulation:</b> Inadequate or no survey carried out</p>	<p>British Board of Agrément certificates make it clear that a site specific assessment must be made in each case</p> <p>SWIGA installers must check suitability of property as defined in the SWIGA QA Framework and technical requirements of the SWIGA Surveillance scheme - Requires initial stringent survey of property to identify its suitability for solid wall insulation (inc photos)</p>	<p>Installer not SWIGA accredited</p> <p><b>External wall insulation:</b> Use of a BBA certificate is not a regulatory requirement and as a result, not all EWI installations will be carried out by BBA certificate holders</p>

	General Advice			Selling			Surveying		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
<b>Cavity Wall Insulation</b>	Consumer understanding of whether this product is suitable for their home	HES EST		Key issue is mis-selling of CWI to unsuitable properties which results in damp etc.  Trades misrepresenting themselves as Govt schemes  Offering finance	NIA Code of Professional Practice outlines marketing, contract and pricing requirements	Misrepresentation Act 1967 does not apply in Scotland, the issue is addressed by section 10 of the Law Reform (Miscellaneous Provisions) (Scotland) Act 1985	Assessment of exposure to wind-driven rain, ensuring cavity is wide enough and clear of debris.  Comprehensive pre-installation assessment is necessary in order to determine cause of any future problems.	British Standards: 8104:1992 (wind-driven rain) Building Regs based on withdrawn BS 8208-1:1985 Guide to assessment of suitability of external cavity walls for filling with thermal insulants	Standards not adhered to
<b>Double Glazing</b>	Consumer understanding of whether this product is suitable for their home	HES EST GGF website: myglazing.com			GGF Consumer Code = The company will give the consumer clear, helpful and adequate sales information. Make sure that vulnerable consumers understand all aspects of contract (term 'vulnerable consumers' is well-defined) Outlines all pre-contractual info  GGF requires MCS accreditation for any companies selling renewable energy products		Inadequate or no survey carried out	Survey required by GGF and to provide a cost for any additional works identified	
<b>Floor Insulation</b>	Consumer understanding of whether this product is suitable for their home And DIY or professional job	HES EST	Minimal info - not mentioned on NIA or BBA website	Mis-selling of inappropriate insulation systems  Overestimating savings and payback period		Largely unregulated and has no guarantee orgs directly associated			Largely unregulated and has no guarantee orgs directly associated
<b>Lighting</b>		HES EST		Consumer knowledge of differences between compact fluorescent lamps (CFLs), halogens, light-emitting diodes (LEDs)  Exaggerated brightness and energy use of products due to loophole in European test standards	Energy Saving Trust brandmarks	LED market is currently a self-regulated market, so a CE mark on the bulb does not necessarily mean that it has been through all of the required quality checks (i.e. when	Survey of current wiring		Largely unregulated and has no guarantee orgs directly associated

	General Advice			Selling			Surveying		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
						imported from outside EU)			
<b>Solar PV</b>	<p>Information on suppliers</p> <p>Overload of information available online - internet searches generally bring up installer websites not independent or impartial sources</p> <p>Require information on EPCs, Planning Permission</p>	<p>General advice available from HES.</p> <p>EST website</p> <p>RECC and MCS for finding suppliers</p> <p>STA provide info such as "Is Solar Energy for me? A concise and simple guide to going solar for homeowners"</p>	<p>How do consumers become aware of RECC and MCS?</p> <p>STA information is for members only (not a consumer-facing organisation )</p>	<p>Cold calling, Pressure selling, Underestimating costs, Exaggerated financial savings, Misleading information, Salespersons misrepresenting themselves</p> <p>If approached speculatively, consumers not checking that installers are MCS registered</p> <p>Offering finance</p> <p>FiTs equivalent schemes since the closure of FiT</p>	<p>RECC = standards around promotions, sales behaviour, discounts, pressure-selling etc.</p> <p>Provide consumers with clear accurate information about the terms of any finance.</p> <p>Make clear to a Consumer before contract signing any requirement for regular servicing.</p> <p>HIES developed EPVS to verify energy performance calculations</p> <p>MCS certified installers</p> <p>HIES Code of Conduct = members must not engage in high pressure selling techniques. Must ensure consumers have right to cancel their contract</p> <p>Trustmark Operating Requirements on Pre-Installation Activities including Marketing, Sales, Survey, Design, Quotation &amp; Contract</p>	<p>Consumer awareness of MCS / RECC / HIES</p> <p>Consumers not obtaining three quotes</p> <p>Those installing through 'rent-a-roof' schemes appear to do less independent checking*</p> <p>If consumers do not report mis-selling to cert schemes - how do companies get sanctioned?</p>	<p>Inadequate surveys</p> <p>Customers receiving quotes from salespersons rather than surveyors.</p> <p>Need for Building Warrant not identified</p>	<p>RECC Code = installers to carry out / pay for technical survey before consumer signs contract.</p>	<p>Lack of standardised surveys</p>
<b>Renewable and low carbon heat technology:</b>	<p>Information on suppliers and suitability of the technology for property / lifestyle</p> <p>Wind Turbines / Energy Storage / Micro CHP Boilers / Hydro / Solar Thermal</p> <p>Require information on EPCs</p> <p><b>For wind turbines:</b> Planning Permission (for wind turbines)</p>	<p>HES</p> <p>EST website</p> <p><b>For hydro:</b> EST website SEPA</p>		<p><b>For solar PV:</b> Performance estimates for heat technologies through MCS standards are unreliable</p> <p>MCS installers not always offering information that could be properly used by the customer to make an informed choice</p> <p>MCS contracts agreed based on a rough estimate, with technical surveys carried out later.</p> <p><b>For energy storage:</b></p>	<p>RECC = standards around promotions, sales behaviour, discounts, pressure-selling etc.</p> <p>Provide consumers with clear accurate information about the terms of any finance</p> <p>Make clear to a Consumer before contract signing any requirement for regular servicing.</p> <p><b>For solar thermal:</b> MIS 3001 (MCS standard) states that technical calculations should be</p>	<p><b>For solar thermal:</b> Widespread confusion in industry about whether technical survey can be conducted after contract is signed</p>	<p><b>For wind turbines:</b> Need to establish that there are sufficient wind speeds for generation</p>	<p>RECC Code = installers to carry out / pay for technical survey before consumer signs contract.</p>	

	General Advice			Selling			Surveying		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
				Exaggerated payback - achieving a financial payback for most domestic users is currently unusual  <b>For Micro CHP:</b> Introduction of PET may see more non-compliance at pre-contractual stage (advertising and in-home selling)	complete before contract signing				
<b>Air / Ground / Water Source Heat Pumps</b>	Information on suppliers and suitability of the technology for property / lifestyle  Require information on EPCs, Planning Permission	HES  EST website		Cold calling, Pressure selling, Underestimating costs, exaggerated financial savings, Misleading information, Salespersons misrepresenting themselves  If approached speculatively, consumers not checking that installers are MCS registered  Offering finance  MCS standards over-predict performance and underestimate likely electricity costs  Introduction of Performance Estimate Template (PET) may see more non-compliance at pre-contractual stage (advertising and in-home selling)  Performance estimates for heat technologies through MCS standards are unreliable	RECC = standards around promotions, sales behaviour, discounts, pressure-selling etc.  Provide consumers with clear accurate information about the terms of any finance  Make clear to a Consumer before contract signing any requirement for regular servicing.  HIES Code of Conduct = members must not engage in high pressure selling techniques. Must ensure consumers have right to cancel their contract HIES developed EPVS (Energy Performance Validation Scheme) to verify energy performance calculations  MIS 3005 - MCS standard for heat pump installations	Wording of MIS 3005 not explicit about when information should be provided to consumers.  MIS 3005 performance information obligations are unclear	Instances of MCS suppliers only providing surveys after contract signing  Installer should ensure property is sufficiently insulated and radiators are appropriately sized  Installer must make accurate heat loss calculations, to design appropriate distribution system  <b>For ASHPs:</b> Incorrect siting of ASHP will lower efficiency	RECC Code = installers to carry out / pay for technical survey before consumer signs contract.  MCS standard (MIS 3005) is clear: the technical heat loss assessment must be carried out before contract is agreed. All customers must be given: specific room heat losses; emitter choice and sizes; and information about the Heat Emitter Guide	Information is often excluded from performance estimates or is not provided in an adequate, clear and accessible manner
<b>Biomass</b>	Information on suppliers and suitability of the technology for property / lifestyle	HES  EST website		Performance estimates for heat technologies through MCS standards are unreliable Introduction of PET may see more non-compliance at pre-contractual stage (advertising and in-home	HETAS  MCS - MIS 3004	Widespread confusion in industry about whether technical survey can be conducted after contract is signed (as per MIS 3004			

	General Advice			Selling			Surveying		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
	Require information on EPCs, Planning Permission			selling)  DECC report = widespread confusion about biomass efficiency (among manufacturers, installers, suppliers)  Fuel requirements grossly underestimated  Installers knowingly or unknowingly exaggerating potential performance, and thus misleading consumers  MCS - contracts often agreed based on a rough estimates, with technical surveys carried out later.		it should always be pre-contract)			
<b>ECO 3</b>	Installations are generally reactive - households approached by installers.	Suppliers identify householders and approach them.  HES can advise householders if they are eligible	Householders often approached by more than one supplier - confusing	Unsuitable measures recommended for properties or householder's lifestyle	Installers provide quotation  Consumer Credit Act 1974 when selling credit to consumers / providing finance.  Green Deal Finance co	How do customers know they are eligible?  Supplier will offer different levels of support - ask for differing customer contributions. Customers required to 'shop around' to get the best deal - do they know this?  Consulting householder on their needs  Not driven by choice		Pre-install assessment carried out on boilers, electric storage heating, pre-existing loft insulation	EPC and/or assessment data not fit for purpose, undermining accuracy of assessment = Recommended measures not suitable for property
<b>HEEPS:ABS</b>	Households finding out they are eligible	HES can refer to HEEPS:ABS  Households may receive info on eligibility from the Council  Any household receiving		Unsuitable measures recommended for properties	Advice and assessment is decoupled from the recommendation of measures and installations i.e. assessors have no vested interest in proposing certain products or measures due to an affiliation with a company  Face-to-face and outreach	Some components of the scheme ECO funded/facilitated and not driven by consumer choice		Pre-install photographs	

	General Advice			Selling			Surveying		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
		HEEP:ABS must be referred for advice on reducing fuel bills			advice available for consumers				
<b>Warmer Homes Scotland</b>	Households finding out they are eligible	HES can advise on qualifying criteria and refers consumers to Warmworks	Most people find out about WHS by word of mouth - more promotion needed					Initial survey of the property to establish which measures available under the scheme are most appropriate for the property (using RdSAP)  Technical survey from Warmworks' sub-contractor	EPC and/or assessment data not fit for purpose, undermining accuracy of assessment = Recommended measures not suitable for property
<b>HES Loan</b>		HES phonenumber provides independent advise	potentially dodgy websites - such as www.homeenergy.scotlandloan.co.uk		Independent advice from HES on suitable measure for property / household - no vested interests in sales		Inappropriate technology or measure selected	Initial check for suitable measures based on EPC  Home Energy Scotland specialist advisors for renewables can provide a report with recommendations	EPC and/or assessment data not fit for purpose, undermining accuracy of assessment = Recommended measures not suitable for property

## Appendix B: Matrix of Contractual Stage Provisions

	Information Provision			Installation			Inspection		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
<b>Loft Insulation</b>	<p>Consumers do not receive appropriate information, or do not understand it</p> <p>Consumer expectations of work or work schedule not met</p>	NIA Code of Professional Practice		<p>Poor installation could result in damp or condensation due to lack of ventilation</p> <p>Gaps around penetrations</p>	British Board of Agrément (BBA) audit installers to ensure they comply with PAS		No mandatory inspections of completed work	BBA undertake audits on installers- can occur at various stages of installation	BBA conduct 50,000 inspections or audits in a year which includes 10 minute desk-based audits. There are not independent checks on each installation
<b>External and Internal Wall Insulation</b>	<p>Consumer misunderstanding</p> <p>Consumer expectations of work or work schedule not met</p>	SWIGA Customer care policy = communicate with customer at all times if things change.	Installer not SWIGA accredited	<p>Risk of cold bridging</p> <p><b>For external wall insulation:</b> Poor detailing around wire / pipe penetrations</p> <p>Poor workmanship (increased risk of water penetration)</p>	<p>Multiple accreditation schemes: National Insulation Association (NIA) Solid Wall Insulation Guarantee Agency (SWIGA) British Board of Agrément (BBA). Each with a consumer code SWIGA requires installation check list signing off the appropriate stages and include photographs taken at each stage</p>	<p>Quality control checks</p> <p>Installer not SWIGA accredited</p>		SWIGA employs the British Board of Agrément (BBA) to operate an independent surveillance scheme of member installer companies. Check that installations adhere to strict technical requirements and will audit and survey workmanship and office processes and procedures to determine this	lack of in-situ testing and monitoring
<b>Cavity Wall Insulation</b>	<p>Consumer misunderstanding</p> <p>Consumer expectations of work or work schedule not met</p>	BEIS have published a consumer guide to issues		<p>Improper installation (cavity not fully filled)</p> <p>CWI installed contrary to good practice</p> <p>Unaccredited installers using scheme logos</p>	<p>Multiple accreditation schemes for installers: National Insulation Association (NIA) Cavity Insulation Guarantee Agency (CIGA) British Board of Agrément (BBA) Each with a consumer code</p> <p>BUFCA - 25 year warranty for Polyurethane foam insulation</p> <p>Lists of companies wrongly using accreditation logos</p>	<p>No central place to identify those who are repeatedly installing incorrectly</p> <p>Companies are allowed to</p>	Damp issues can take years to appear	CIGA has a dedicated Independent Surveillance of Assessment Platform for members CIGA-ISA. Provides installers with a streamlined approach to fulfilling Independent Surveillance needs under PAS2030-17	Independent inspections (i.e. not by installers) to impartially validate

	Information Provision			Installation			Inspection		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
					on code websites. The Consumer Protection Regs 2008 sch1, bans making false claims about membership of codes. Offences can be criminal and civil and local trading standards and TSS can bring charges.	continue to advertise with logos		BBA approved Installers are subject to regular surveillance by BBA Inspectors	
<b>Double Glazing</b>	Consumer misunderstanding  Consumer expectations of work or work schedule not met	GGF = Companies must have efficient user-friendly procedures in place. Initial response or acknowledgement to the consumer's enquiry is to be within two weeks		Damage to window surroundings  Disruption to consumer	Double Glazing & Conservatory Ombudsman Scheme (DGCOS) installer accreditation  GGF accredited installers	FENSA - self assessment to monitor building regulation compliance for replacement windows and doors. Not applicable in Scotland due to different Building Regs	Improper installation	GGF Member installations can be inspected by GGF providing the installer is advised through the GGF Conciliation service - an independent and impartial dispute resolution procedure available for customers of GGF members	These inspections are reactive, not preventative
<b>Floor Insulation</b>		EST	Very limited information available	Disruption from lifting floorboards  Solid floor insulation may require additional work to refit doors and skirting (due to raised floor height)	Mid-installation photographs are now mandatory under PAS:2019	Largely unregulated and has no guarantee orgs directly associated			Largely unregulated and has no guarantee orgs directly associated
<b>Lighting</b>				Poor electrical wiring or improper installation  Compatibility with dimmer switches	NICEIC approved contractor scheme. NICEIC contractors are assessed annually (audit rather than inspection)	No inspections of completed installations			
<b>Solar PV</b>	Consumer misunderstanding of technology  Consumer expectations of work or work schedule not met	HIES: Scheme members must provide clear and accessible information at all stages of the work they carry out. Must identify consumers with additional needs and provide appropriate support.		Damage to roof, Building Regulations approval is required if the panels will add more than a third to the roof weight - proper initial assessment is critical.	HIES and RECC Consumer Codes  From 1st January 2020, MCS certificates raised for solar PV, battery storage or wind installations will now also include RECC membership, and all associated benefits.  This simplified integration of consumer code		Ensure system performance meets expectations and system is safe	RECC = installers must check the system fully and test it in line with the MCS Installer standards  Free independent inspections (to assist with installation/product defects at HIES's discretion)	Independent inspections

	Information Provision			Installation			Inspection		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
		RECC: information must be appropriate for customers - installers must ensure customers understand documents (quotation, contract and guarantee)  RECC Consumer Guidance document	Consumers not provided with guidance by installers - only available on RECC website		membership with MCS certification aims to increase awareness for consumers and reduce costs for installers in a move to reposition consumer protection as a central element of certification.				
<b>Renewable and low carbon heat technology:</b>  Air / Ground / Water Source Heat Pumps / Solar Thermal / Biomass / Wind Turbines / Energy Storage / Micro CHP		HIES: Scheme members must provide clear and accessible information at all stages of the work they carry out. Must identify consumers with additional needs and provide appropriate support.  RECC: information must be appropriate for customers - installers must ensure customers understand documents (quotation, contract and guarantee)  RECC Consumer Guidance document	Consumers not provided with guidance by installers - only available on RECC website	Use of incorrect or poor-quality parts, and/or substandard workmanship	MCS  RECC  HIES  <b>For heat pumps:</b> MIS 3005 - MCS standard for heat pump installations  <b>For energy storage:</b> MCS: new Battery Storage Standard (MIS 3012) STILL DRAFT  <b>For Micro CHP:</b> MCS certified installers - installation standard MIS 3007 and MIS 3007-2		Ensure system performance meets expectations and system is safe	RECC = installers must check the system fully and test it in line with the MCS Installer standards  Free independent inspections (to assist with installation/product defects at HIES's discretion)	Independent inspections
<b>Hydro</b>						Not covered by HIES  Not mentioned on MCS website	Ensure system performance meets expectations and system is safe		

	Information Provision			Installation			Inspection		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
<b>ECO 3</b>					<p>All suppliers must comply with MCS PAS 2030: 2017 - now transitioning to PAS 2030: 2019 and PAS 2035: 2019</p> <p>The ECO Order requires that all ECO measures, except for Demonstration Actions and certain district heating system measures, must be delivered by TrustMark Registered Businesses.</p>			<p>Independent Technical monitoring and Score monitoring of 5% of notified measures to assess whether these have been installed in accordance with requirements</p> <p>Installers with poor technical monitoring results are subject to more inspections</p> <p>Expected responsibility for technical monitoring will be transitioned to TrustMark by the start of 2021</p>	<p>Primary function of monitoring is to check delivery of carbon savings, rather than quality</p> <p>Not all properties audited, hence some quality issues may slip through the net</p>
<b>HEEPS:ABS</b>	Installations often not actively sought by consumers - so they will require more information about what the measure is being installed, and the benefits. Where to go for additional information		Can differ between delivery agents / councils		All work must meet ECO standards - whether or not this funding is applied for			<p>All properties are inspected post-installation, not just a sample</p> <p>An independent (from the contractor) clerk of works should be appointed as part of the Quality Assurance process</p>	No clear and consistent guidelines or expectations of what should be carried out with regard to quality control
<b>Warmer Homes Scotland</b>		<p>Good explanation of customer journey on website.</p> <p>Warmworks surveyor explains available options to householder</p>			Warmworks approved subcontractors - all must have PAS 2030 (or be working towards) and the relevant MCS, Oftec or Gas Safe certs			<p>Independent inspection of the work done - within 5 days of completion</p> <p>Additional QA audits carried out on sample</p>	

	Information Provision			Installation			Inspection		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
<b>HES Loan</b>		Information from HES and from installer			Installers must be Green Deal certified or MCS accredited	Green Deal orb not updated regularly (risk that unaccredited installers are listed as accredited)		Householder uses accredited installer who should follow measure specific inspection criteria	

## Appendix C: Matrix of Post-contractual Stage Provisions

	Complaint Raising			Redress			Ongoing Maintenance		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
<b>Loft Insulation</b>	Consumer complaint - no timeline for resolution or what to expect as an outcome	National Insulation Association (Industry Body) has procedures for complaints against registered members  BBA certified installers must have a complaints process. BBA also follows an approved homeowner complaints procedure	No details of this on website			Lack of organisations offering loft insulation guarantees  TrustMark does not offer redress  BBA cannot offer compensation or arrange for another installer to correct non-compliant work	Advertised as "maintenance free"		
<b>External / Internal Wall Insulation</b>	Long process for consumers  Unclear who to contact	National Insulation Association (Industry Body) has procedures for complaints against registered members  SWIGA members must promptly and within 7 days investigate and seek to resolve customer complaints.  SWIGA have a pre-completion mediation service - Installers must investigate a complaint referred by SWIGA in 14 days	No details of this on website  Non-SWIGA members	Costs of remedial works for improper installations	SWIGA provide 25-year guarantee for registered installers. Also operates a mediation service that all members have to be party to.  Independent insurance-backed guarantees	Installers not registered with SWIGA or with no Insurance Backed Guarantees (IBG)  If a SWIGA member breaks the code the most serious sanction is termination of membership  TrustMark does not offer redress  IBGs only pay out if installer has gone bust	Consumers unaware of maintenance requirements and SWI system is damaged	SWIGA QA framework = must provide an owner's manual with maintenance requirements	Unclear whether these requirements are communicated prior to install
<b>Cavity Wall Insulation</b>	Long process for consumers  Unclear who to contact	Can be raised through NIA, CIGA, or BBA.  Voluntary support group CIVALLI  CIGA provide free inspection	No details of this on NIA website	Cost of CWI extraction, plus costs of repairing damage to home.  CIGA retrospectively added a 'maintenance clause' to guarantees where replacement	Cavity Insulation Guarantee Agency (CIGA) if installer no longer trades. Will refer to ADR.  New ECO provisions might allow replacement of poorly installed CWI in some instances.  BUFCA - 25-year warranty for Polyurethane foam insulation	No Government compensation scheme.  CIGA will not provide compensation for damage / health impacts etc.  Clarity and communication of 'maintenance clause'; i.e. what is	Damp, mould and water penetration. Extraction may be necessary for poor or unsuitable installations.  Scammers purporting to be solicitors or maintenance companies.  Extraction industry boom - incomplete		Installers not providing follow-up checks

	Complaint Raising			Redress			Ongoing Maintenance		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
				copy was requested  Further issues of CMCs looking for claims (as PPI window closes)		expected of householders and are they aware of this  TrustMark does not offer redress support	extractions are now an issue.  Cold callers and National 'helplines' offering free compensation to homeowners.		
<b>Double Glazing</b>		GGF = Companies must publicise to consumers key elements of their accessible complaints handling system in their point of sale, pre-contract material and contractual material.  Can be escalated to Conciliation Manager at GGF, then escalated further to The Glazing Arbitration Scheme (TGAS), operated by the Centre for Effective Dispute Resolution (CEDR)  Double Glazing & Conservatory Ombudsman Scheme (DGCOS) - free complaint investigation into accredited members			From 2014 IBGs are compulsory for the glazing industry  GGF specify that IBGs must be 10-years	Not all IBGs are the same - some may be confusing or at worst not properly protect the consumer  TrustMark does not offer redress			
<b>Floor Insulation</b>			Largely unregulated and has no guarantee orgs directly associated		UFI installed under ECO 3 requires 25-year guarantee (previously no guarantees)  Installers may offer IBG	TrustMark does not offer redress			
<b>Lighting</b>		For NICEIC registered installers there is a complaints process			Warranties on LED bulbs typically last 2-4 years, so if the bulb fails within this time consumers should get money back  NICEIC "Platinum Promise" protects consumers if an installer is no longer registered, or has ceased trading	Warranties will only cover product replacement, not installation or labour  Warranties will not cover any issues caused by bad electrical wiring or			Not required

	Complaint Raising			Redress			Ongoing Maintenance		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
						improper installation			
<p><b>Renewable and low carbon heat technology:</b></p> <p>Solar PV / Ground / Water / Air Source Heat Pumps / Wind Turbines / Energy Storage / Micro CHP Boilers</p>		<p>MCS complaints process: contact installer, then industry body, then MCS as final resort.</p> <p>RECC and HIES both provide CTSI approved Alternative Dispute Resolution</p> <p>RECC provides independent arbitration.</p> <p>HIES - Members must adequately train their staff to handle complaints and must nominate a person who is the designated complaints handler.</p> <p>HIES scheme provides investigation and/or an attempt at settlement by conciliation or mediation</p>	<p>Lack of complaints process for customers using non-certified installers</p>	<p>Installers cease trading</p>	<p>Insurance Backed Guarantees</p> <p>HIES has appointed The Dispute Resolution Ombudsman, independent of members and consumers - Can make financial awards for loss, distress, inconvenience or breach of contract which HIES will enforce</p>	<p>Not a mandatory requirement under MCS</p> <p>TrustMark does not offer redress</p>	<p>Consumers unaware of maintenance requirements</p> <p><b>For solar PV:</b> Consumers not knowing how to check their system is working correctly and how to maximise the electricity generated by it</p> <p>Scams e.g. recent 'British Trading Solar Association' offering homeowners 'free solar health checks'</p> <p>Those with PV targeted by 'add-on' sales (batteries, voltage optimisers, diversion devices, replacement inverters, extended warranties and insurance etc.)</p>	<p>RECC = consumers provided with operating and maintenance instructions - providing handover documents cannot be linked to receipt of full payment</p> <p>Citizens Advice Consumer Service</p> <p><b>For solar PV:</b> HIES - Members must provide Workmanship Guarantee, minimum of two years cover. And two-year product guarantees</p> <p>RECC guidance on 'add-ons **</p>	<p><b>For solar PV:</b> Doing maintenance work does not require MCS certification</p>
<p><b>Solar Thermal</b></p>	<p>RECC = level of formal complaints about solar thermal installation is the highest of all heat technologies</p>	<p>MCS complaints process: contact installer, then industry body, then MCS as final resort.</p> <p>RECC provides CTSI approved Alternative Dispute Resolution</p> <p>RECC provides independent arbitration.</p>	<p>Lack of complaints process for customers using non-certified installers</p> <p>Technology not covered by HIES</p>	<p>Installers cease trading</p>	<p>Insurance Backed Guarantees</p>	<p>Not a mandatory requirement under MCS</p> <p>TrustMark does not offer redress</p>	<p>Consumers unaware of maintenance requirements</p>	<p>RECC = consumers provided with operating and maintenance instructions - providing handover documents cannot be linked to receipt of full payment</p>	

	Complaint Raising			Redress			Ongoing Maintenance		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
<b>Biomass</b>		HIES - Members must adequately train their staff to handle complaints and must nominate a person who is the designated complaints handler.  HIES scheme provides investigation and/or an attempt at settlement by conciliation or mediation	Lack of complaints process for customers using non-certified installers	Installers cease trading	Insurance Backed Guarantees  HIES has appointed The Dispute Resolution Ombudsman, independent of members and consumers - Can make financial awards for loss, distress, inconvenience or breach of contract which HIES will enforce	Not a mandatory requirement under MCS  TrustMark does not offer redress	Consumers unaware of maintenance requirements		
<b>Hydro</b>			Technology not covered by HIES  Lack of complaints process for customers using non-certified installers				Consumers unaware of maintenance requirements		
<b>ECO 3</b>		TrustMark will be integrated into ECO3. TrustMark does not investigate specific consumer complaints, but members must follow the complaints procedure and use ADR if necessary	Overlap between TrustMark and the existing CPS schemes?  Ofgem do not have oversight of contractual arrangements between energy companies and installers - limited ability to resolve complaints  No scheme specific complaints/ sanctions process		TrustMark financial protection = minimum 2 years, except for insulation - min. 25 years. All measures under ECO3 require an appropriate guarantee.	Consumer not made aware of how to seek redress  Ofgem do not hold details of any warranties or guarantees  Not all measures require guarantees/ warranties  No requirement for insurance backed guarantees  TrustMark does not offer redress		Trustmark includes repair, maintenance and improvement	Unclear whether warranties/ guarantees can be transferred to a new householder
<b>HEEPS:ABS</b>	An area-based approach means that fewer organisations are involved in scheme management,	HES can assist householders through complaints process	Can differ between delivery agents / councils		Consumer has one clear point of contact at the local authority in case of complaints or queries  Guarantees and/or warranties ranging up to			All properties receive a post-completion visit with advice to maximise benefits of installation. LAs must deliver 'after	

	Complaint Raising			Redress			Ongoing Maintenance		
	Issue	Provision	Gaps	Issue	Provision	Gaps	Issue	Provision	Gaps
	one clear point of contact for the consumer in relation to QA				25 years depending on products installed			care' pack with maintenance and guarantee info	
<b>Warmer Homes Scotland</b>		Customer satisfaction survey	No details of complaints process on Warmworks website			After 1 year, Warmworks or SG take no responsibility for any faults or issues		Where required, a full annual service completed 12 months later	
<b>HES Loan</b>			Limited support from HES as contract is with installer		Householder uses accredited installer who should follow measure specific redress support				

## Appendix D: Glossary of Consumer Protection Schemes

Scheme	Acronym	Service	Sector
British Board of Agrément	BBA	Product certification Installer accreditation	Insulation
British Urethane Foam Contractors Association	BUFCA	Installer accreditation	Insulation
Cavity Insulation Guarantee Agency	CIGA	Independent guarantee Installer accreditation	Insulation
Cavity Wall Insulation Self Certification scheme	CWISC	Self-certification scheme run by SWIGA	Insulation
Double Glazing & Conservatory Ombudsman Scheme	DGCOS	Installer accreditation Alternative dispute resolution service	Glazing
Glass and Glazing Federation	GGF	Installer accreditation	Glazing
Heating Equipment Testing and Approval Scheme	HETAS	Product certification Installer accreditation	Heating
Home Insulation & Energy Systems Quality Assured Contractors Scheme	HIES	Installer accreditation Consumer Code	Renewables
Insurance Backed Guarantees	IGBs	Guarantee if a company ceases to trade	All
Microgeneration Certification Scheme	MCS	Product certification Installer accreditation Quality Assurance	Renewables
National Inspection Council for Electrical Installation Contracting	NICEIC	Installer accreditation Work certification and notification	Lighting
National Insulation Association	NIA	Installer accreditation Manufacturer accreditation	Insulation
Renewable Energy Consumer Code	RECC	Installer accreditation Consumer Code	Renewables
Solid Wall Insulation Guarantee Agency	SWIGA	Independent guarantee	Insulation
The Glazing Arbitration Scheme	TGAS	Alternative dispute resolution service	Glazing
TrustMark	-	Installer accreditation	All

## Appendix E: Stakeholder Workshop SWOT analysis

### 1. Collective Support Package

#### Strengths

- Could be technical enough to allow enforced decisions, but likely to lack the specificity tailored to individual households.
- Home Energy Scotland doing a lot already. Investment would be needed to increase awareness.
- But where would consumers go to complain if issues? Or a ask about fabric?
- Database needs to be operated by trusted organisation or body.

#### Weaknesses

- How to make specific to Householders
- How will this work for fabric instead of renewables?
- Who is responsible for management of the support package?
- Who oversees creation of package – different priorities for different organisations?
- Not easy to establish trust as so many bodies around.

#### Opportunities

- Performance estimate templates are one proposed alternative to increase the specificity issue. These documents could be made compulsory. They include standardised calculations if done for each technology – generate consumer trust.

#### Threats

- GDPR concern if referrals between different orgs.
- Vulnerable customers and those at added risk need further support: Urban / rural split considered? Due to differences with energy costs. Also, fewer installers in rural areas – so when technology breaks, takes longer, but still pay the same as urban areas.

### 2. Pre-Contractual Audit

#### Strengths

- Very doable if spot checks model instead of auditing as standard – RECC currently do spot checking, wider practice known to be poor

#### Weaknesses

- Difficult and expensive.
- Installers could perceive as additional barrier.

#### Opportunities

- Where installers have to enter stuff to database they are diligent - so if onus on them at contract stage, can reduce need for enforcement later on

#### Threats

- Abuse possible – sign this contract/ don't sign for cash discount

- Anything included to ensure consumer understanding at pre-contract stage? Is information accessible to them and their needs? Otherwise, providing info-pack can become a 'get-out' / tick box for installer. Audit to check this also

### 3. Contract and information provision

#### Strengths

- Best practice already – but not a legal requirement
- Consumers are more tech savvy
- Theoretical process in place
- Needs to be an enforceable requirement

#### Weaknesses

- Can best practice be enforced?
- Is existing guidance enforced already?
- Existing guidance / landscape already complex
- Data management / control

#### Opportunities

- Can cut some of the risk for consumer
- Finance – standards should be linked to private finance (re-mortgaging etc.)

#### Threats

- Getting new legislation is very difficult
- We do not want to keep adding layers – landscape already very complex
- Guidelines are not useful

### 4. Installation Process

#### Strengths

- Second nature to take videos and photos now
- Some schemes already require this
- Contractual doc in most construction work already required (dilapidation survey)

#### Weaknesses

- Photos not always fool proof or applicable
- Process works for public funded installs as government pays for inspection process (but can be cost-prohibitive for self-funded installs)

#### Opportunities

- Also protects installers
- Could be used as evidence of good previous work (e.g. if consumer cannot afford fully accredited installer, or just as another layer of evidence)
- Government to provide incentives

## Threats

- Increased costs
- Scale of install rates required is massive so requiring this for all schemes is also massive; the amount of installs in the self-funded market is also going to be a huge proportion and as above, the costs are prohibitive
- Need an incentive

## 5. Redress Process

### Strengths

- Representation and handholding
- Avoids reiteration and upset
- Reduced risk of postcode lottery

### Weaknesses

- Advice info provision at pre-install stage about redress options
- Stronger links between guarantee organisations and advice orgs
- Needs to be a relationship with financial ombudsman – not the case with Green Deal

### Opportunities

- Energy Efficient Scotland – suggest this is implemented at early stages
- Identify relationships between organisations providing redress and inadequate protections
- Data sharing agreement

### Threats

- Opportunity for claims management companies to steal data / info about possible claims
- Contractors operating outside of Trustmark and other guarantee organisations not included?

## 6. Regulation of code / guarantee organisations

### Strengths

- Gold plated standard – mitigates risk
- Robust checks on adherence to guidelines

### Weaknesses

- Currently there are a number of competitive elements to the market – but this would be a move to differentiate on price rather than product and quality

### Opportunities

- May draw in other larger organisations as there will be reduced risks

## Threats

- Grade A insurance will not underwrite long guarantees
- Market might thin out

## 7. Action against rogue traders

### Strengths

- Much better data sharing between Trading Standards Scotland and Police Scotland – more robust evidence base which is tapped into by Scottish Government
- Guarantee organisations currently ensure that new companies who have links to previous one's commit to resolving previous redress issues before their new company can join

### Weaknesses

- Companies disappearing
- Virtual card – updated activity / accreditation
- Extra support and awareness for vulnerable customers

### Opportunities

- Trading standards have access to intelligence – proactively to monitor pop-up adds, etc
- Energy Efficient Scotland – more funding to support this area

### Threats

- Opportunities for rogue traders to exploit different areas
- Able-to-pay market exposed without more robust legislation
- Cases not going through court – Scottish Government involvement

## 8. Monitoring

### Strengths

- Already in place for consumer code organisation (CTSI) – Trading Standards Scotland audits
- Approved Certifier of Construction / Approved Certifier of Design – good precedent
- Scottish Government inspection company (Pennington's)

### Weaknesses

- Less known for self-funders (in relation to Scottish Government inspections) - Era of self-funders is now

### Opportunities

### Threats

- Risk of two-tier system – issues arising outside of the data warehouse world would not feature in analysis

## Appendix F: Bibliography

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