Home insulation

A report on the Call for Evidence carried out by the OFT

August 2012

OFT1433
1 EXECUTIVE SUMMARY

1.1 This report summarises the outcome of the OFT’s Call for Evidence into the home insulation market, which was launched in April 2012.

1.2 The home insulation sector had a value of around £700-800 million in 2010 and the Government expects it to grow significantly over the coming years as a result of its plans to increase the energy efficiency of the UK housing stock. Insulation can create important benefits for consumers - good quality insulation that has been well-installed leads to warmer homes and lower energy bills, and ultimately is one of the most cost-effective ways of meeting the Government’s climate change goals.

1.3 In launching this Call for Evidence, we were aware of a large number of consumer complaints relating to the market for energy efficiency products, including insulation. We had also received some complaints about an alleged lack of competition at different points in the insulation supply chain. We thought there was merit in carrying out a quick market review ahead of the introduction of the Government’s Green Deal and Energy Company Obligation (ECO) policies. The Government is proposing to introduce a more market-based approach to supporting the home insulation sector, the success of which relies on the private side of the market working as effectively as possible.

Issues raised by respondents

1.4 The issues raised by respondents to the Call for Evidence can be grouped under four broad headings:

- Effectiveness of the insulation supply chain – is there strong competition between players, and are there significant barriers to entry and innovation?

- At the downstream installation level, how have volumes and prices paid for insulation varied over time?

- Quality of installation – is appropriate insulation installed to a high quality? Is it installed in suitable properties?
Consumer redress - if things go wrong, is there adequate redress for consumers?

1.5 In relation to the supply chain, responses suggested that there was a relatively high degree of market concentration among insulation manufacturers. Market concentration is one of the factors that can create the potential for anti-competitive behaviour. Through the Call for Evidence we heard some concerns about the extensive use of rebates paid by large manufacturers to distributors. We also received a small number of allegations of attempted resale price maintenance (RPM) at the retail level. In some cases, both these practices can have a negative effect on consumers.

1.6 Several respondents argued that the lack of competition in the market for certifying new products may be acting as a constraint on entry and innovation. The British Board of Agrément\(^1\) (BBA) appears to have a very strong position in insulation product certification in the UK, and some respondents claimed that its clearance process can be slow.

1.7 At the downstream level, the information we received suggested that demand for installing insulation in existing buildings is strongly driven by Government targets and schemes. The existing targets on energy suppliers – CERT and CESP – appear to have been largely successful in increasing the rates of retrofit insulation, particularly of loft and cavity walls, contributing to the Government’s climate change targets. However, there currently appears to be little self-generated consumer demand particularly for cavity and solid wall insulation.

1.8 There have historically been peaks and troughs in the volume of installations, which appear to have been driven partly by changes in Government targets over time, and partly through the way energy suppliers have planned to meet their targets. During the current CERT period, some energy suppliers appear to have made a slow start in meeting their targets, with the result that demand and prices have risen.

\(^1\) More about the BBA can be found here: [www.bbacerts.co.uk](http://www.bbacerts.co.uk)
in recent months as the target deadline approaches. The uneven utilisation of installation capacity may lead to higher average installation prices over the life of a scheme which, to a certain degree, will be passed on through energy bills to consumers.

1.9 In relation to quality of installation, some respondents raised concerns that consumers sometimes do not receive the most suitable form of insulation for their home. We were told that, in part, this is because installers and energy suppliers have an incentive to get a certain number of measures installed to meet their targets, rather than necessarily to install insulation to meet individual consumers’ needs. The new Green Deal assessment process should help address this concern.

1.10 We also received complaints about the quality of some insulation installations under the Government’s CERT scheme. However, the scale of any problem is unclear because the monitoring data available does not give a clear picture of the number of houses which have failed one or more of the testing criteria. Further, there appears to be limited systematic monitoring of long-term problems. Again, the new Green Deal regime should be of help in addressing concerns about the quality of installation.

1.11 Finally, some respondents to the Call for Evidence told us that consumers do not always receive effective redress if things go wrong. In particular, we heard concerns that some consumers found difficulties when attempting to gain redress through the main guarantee scheme for cavity walls – the Cavity Insulation Guarantee Agency (CIGA). We were also told that consumers can be particularly susceptible to mis-selling (for example pressure sales or misleading claims) because of their lack of knowledge and understanding about insulation products.

**Recommendation and actions**

1.12 Following on from the information received about the competition concerns, we wrote to an insulation manufacturer in relation to one allegation of RPM. It confirmed it was not party to any such agreement. We will keep a watching brief on the market and investigate any further complaints we receive if there is evidence of consumer harm.
1.13 In relation to the certification process the BBA has told us that it is working to improve efficiency. We have also made recommendations about how Government and the building industry can help the certification process become more efficient by facilitating greater competition between certification bodies.

1.14 We would expect that some of the concerns regarding quality and consumer redress would be ameliorated by the introduction of the Green Deal and ECO. The Government’s aim is to incentivise more self-generated demand for insulation, and to shift Government support towards more costly measures (solid wall insulation and ‘hard to treat’ cavity walls). It is also proposed that the Green Deal Provider will be more clearly responsible for ensuring consumer complaints are dealt with effectively.

1.15 However, we believe that further steps might be taken to ensure that there is even greater focus on installation quality and consumer outcomes in future. In particular:

- Government should ensure that the approach to monitoring the quality of installation under ECO and the Green Deal is further developed, with clearer incentives to reduce the incidence of problems. It should make sure that one body has clear responsibility for monitoring installations in the longer term.

- The system for providing redress could be made more effective, including through greater transparency over complaints, and changes to the governance of CIGA (and in future SWIGA, the Solid Wall Insulation Guarantee Agency) to include consumer representation rather than just industry representation on the Board.

- The OFT has reviewed information from consumers and organisations that are involved in the Energy Efficiency sector, most notably industry associations and consumer organisations, and been working closely with Trading Standards Services to find out more about potential issues affecting consumers. The OFT continues to actively examine issues that may be causing consumer detriment in
this sector and will look to address these, including through potential enforcement action where appropriate, working with local authority Trading Standards Services and others.

1.16 The OFT also encourages Government to consider the lessons to be learnt from recent fluctuations in demand for installations under CERT and CESP, and apply these to the new ECO scheme. Responses to the Call for Evidence suggest that some energy suppliers planned to deliver later in scheme periods while some others were slow to start installing measures at the beginning of the period, and had to ramp up installations very quickly towards the end of the schemes, at increased cost. We have not found clear evidence that installers have behaved anti-competitively in driving up prices. Instead the recent price increases appear to have been driven largely by the increase in demand from energy suppliers and the increasing search costs in identifying properties suitable for insulation. The OFT has made a number of specific suggestions regarding the operation of the ECO scheme.

1.17 The OFT does not propose to carry out a market study into the insulation sector at this time, given the imminent introduction of the Green Deal and ECO, which are likely to change the market significantly. However, the OFT intends to work with Government and other parties to pursue the recommendations made in this report. The OFT may consider carrying out further work in the future once the Green Deal has bedded in, if there is evidence that the concerns raised above remain unresolved, or other concerns emerge.

1.18 We would like to thank all the respondents to our Call for Evidence for their time and effort - this was much appreciated.
INTRODUCTION

The role of the OFT

2.1 The OFT’s role as the UK competition and consumer protection authority is to make markets work well for consumers. Under Section 5 of the Enterprise Act 2002, the OFT has the function of obtaining, compiling and keeping under review information about matters relating to conducting its functions. This is done with a view to ensuring that the OFT has sufficient information to take informed decisions and carry out its functions effectively. One of the tools available to the OFT to achieve this is the Call for Evidence.

Approach to looking at the home insulation sector

2.2 The OFT launched the Call for Evidence into home insulation because:

- This is an important market. The home insulation sector had a value of around £700-800 million in 2010 and the Government expects it to grow significantly over the coming years as a result of its attempts to increase the energy efficiency of the UK housing stock to help achieve its overall climate change targets. Insulation is important to individual consumers too: good quality insulation that has been well-installed leads to warmer homes and lower energy bills, and ultimately is one of the most cost-effective ways of meeting the Government’s climate change goals.

- We were aware of a large number of consumer complaints relating to the energy efficiency sector, including insulation. We had also received some complaints about an alleged lack of competition at different points in the insulation supply chain.

- We were keen to carry out a quick market review ahead of the introduction of the Government’s Green Deal and ECO policies. The Government is proposing to introduce a more market-based approach to supporting the home insulation sector, the success of which relies on the private side of the market working as effectively as possible.
• We wanted to assess through this Call for Evidence whether the current market was working well for consumers.

2.3 In this report, the OFT aims to identify any regulatory, competition and consumer-facing barriers with a view to them being removed or mitigated. This should in turn make it easier and cheaper for consumers to take up insulation products, including through the Green Deal or ECO.

2.4 The Call for Evidence consisted of a public invitation for any interested party to submit a response, along with targeted questionnaires sent to key stakeholders and interested parties. We are grateful to everyone who contributed their time and effort to this work. We received nearly 120 responses to our Call for Evidence. These ranged from individual consumers to large corporations and local government.

2.5 The Call for Evidence was, by its nature, reliant on the responses received, and was intended to provided a quick stock take of the sector. The evidence presented below primarily relates to potential concerns raised by respondents and does not necessarily reflect the views of all relevant stakeholders. Accordingly, it should not be assumed that the information provided to us – much of which is unverified - represents a comprehensive view of the sector.

Table 2.1: Summary of responses to the call for evidence

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Number of responses</th>
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</thead>
<tbody>
<tr>
<td>Government</td>
<td>3</td>
</tr>
<tr>
<td>Regulators</td>
<td>2</td>
</tr>
<tr>
<td>Insulation Manufacturers</td>
<td>13</td>
</tr>
<tr>
<td>Insulation Distributors</td>
<td>5</td>
</tr>
<tr>
<td>Insulation Installers</td>
<td>6</td>
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</table>
The report

2.6 The report is divided into eight chapters. Chapter 1 gives the Executive Summary. Chapter 2 provides the introduction. Chapter 3 sets out our understanding of the household insulation sector. Chapter 4 describes the concerns identified about the supply chain, and explains what actions the OFT has taken and will continue to take to resolve those concerns. Chapter 5 describes concerns about price and volume fluctuations, and makes recommendations for mitigating those concerns in future. Chapter 6 describes concerns raised with us about the quality and suitability of some insulation installations, and goes on to make recommendations about how to address these concerns. Chapter 7 covers the concerns heard by the OFT about redress and makes recommendations which are intended to help resolve those concerns. Chapter 8 explains the next steps the OFT intends to take.
3 THE HOME INSULATION SECTOR

3.1 This section highlights key features of the home insulation sector, based on information gathered through the Call for Evidence and from other, publicly available, sources. It covers the following issues:

- What products fall within the scope of the home insulation sector?
- How does the supply chain for insulation operate?
- Where does demand for insulation come from – and in particular, what is the role of Government schemes and targets in driving overall demand for home insulation?

What is home insulation?

3.2 Insulation material is used to reduce heat loss from a building. The main residential applications of insulation are:

- wall insulation – including:
  - cavity wall insulation – properties built after the 1920s typically have cavity walls (the cavity prevents water and humidity from filtering into the house) and the insulation can be fitted in the space between the outer and inner walls
  - external and internal solid wall insulation — properties built before the 1920s typically have solid walls. The insulation can be fitted either on the outside of the wall or on the inside
- loft insulation
- roof insulation – including pitched roofs and flat roofs
- floors
- pipe and cylinder cladding.
3.3 For the purposes of this Call for Evidence, we have not included windows (double glazing) within scope, although these clearly have an impact on the overall energy efficiency of a property. Much of the analysis in this report focuses on wall and loft insulation—the applications which are the dominant forms of retrofit insulation and that have most benefitted from Government schemes.

3.4 It is important to distinguish between insulation for new properties and ‘retrofit’ of insulation on existing homes. Around 20-30 per cent of the insulation market currently relates to insulation of new build. The remaining 70-80 per cent is retrofit.\(^2\)

3.5 Most of the Government schemes and targets (described in more detail below) relate to the retrofit part of the sector, while Building Regulations are responsible for, amongst other things, defining energy-efficiency standards for new buildings. However, the supply chain is common to both retrofit and new build.

3.6 Insulation materials can be classified into two broad groups, mineral fibres and plastic foams, and can be sold in various forms:

- rolls (typically used for lofts)
- slabs (typically used for cavity walls in new buildings and solid walls)
- blowing material (typically used to fill cavity walls in existing buildings).

3.7 As noted in more detail below in the discussion of the supply chain, the production technology is typically specific to each insulation material, but similar for different products of the same material (for example, glass wool slabs, blowing glass wool and glass wool rolls).

Background on the supply side of the sector

3.8 The supply chain for insulation products in the UK is similar to that of other supply chains in the building sector:

- manufacturers produce a range of insulation materials for different applications
- distributors manage the logistics of moving the products around
- contractors are responsible for installing the insulation material in new and existing buildings.

3.9 Figure 3.1 gives a stylised representation of the supply chain for insulation.

Figure 3.1: Stylised insulation supply chain

3.10 Table 3.2 gives an indication of some of the largest firms at different levels of the supply chain. There is further discussion of market concentration in Chapter 4.
### Table 3.2: Major firms operating in the insulation supply chain

<table>
<thead>
<tr>
<th></th>
<th>Manufacturers</th>
<th>Distributors</th>
<th>Contractors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturers</strong></td>
<td>Mineral fibre</td>
<td>Plastic foam</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knauf, Rockwool, Superglass, Isover</td>
<td>Kingspan, Celotex, Recticel, Xtratherm</td>
<td></td>
</tr>
<tr>
<td><strong>Distributors</strong></td>
<td>Specialist</td>
<td>General Builders’ Merchants</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>SIG, Encon, Minster</td>
<td>Travis Perkins, Jewson, Wolseley</td>
<td>Mark Group, SIG Energy Management, Dyson, Insta, Carillion</td>
</tr>
<tr>
<td></td>
<td>General Builders’ Merchants</td>
<td>Travis Perkins, Jewson, Wolseley</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>DIY</td>
<td>B&amp;Q, Wickes</td>
<td></td>
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Source: OFT

3.11 The total value of home insulation manufactured in the UK in 2010 is estimated to be around £760m, compared to £790m in 2008. The estimated breakdown of manufacturing by type of insulation is shown in Figure 3.3:

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3.12 Manufacturers tend to specialise in a limited number of insulation materials. Insulation materials can be classified into two broad groups: mineral fibres and plastic foams.

- Plastic foams account for 60 per cent of the sector and include PIR/PUR, expanded and extruded polyesterene (EPS and XPS); phenolic foam. Plastic foams are primarily used to insulate new buildings, but EPS can also be used for retrofit cavity wall insulation. The largest manufacturer is Kingspan, other large manufacturers are Celotex, Recticel and Xtratherm.

- Mineral fibres account for 40 per cent of the sector and include glass wool and stone wool. Mineral fibres are the main products for retrofit loft and cavity wall insulation, but can also be used to insulate new buildings. Glass wool accounts for the majority of sales of mineral fibre. The largest manufacturer is Knauf, which produces both glass...
and stone fibre. Rockwool specialises in stone fibre, while Superglass and Isover specialise in glass fibre.

3.13 Responses to the Call for Evidence suggest that direct sales to insulation contractors represent a small portion of manufacturers’ turnover. The main routes to market appear to be specialist distributors and general builders’ merchants. General builders’ merchants stock insulation materials alongside other building products. Often general builders’ merchants have acquired or set up a specialist insulation distributor—for example Wolseley owns Encon, Jewson owns Minster, and Travis Perkins owns CCF. However, the largest insulation distributor is now an independent specialist—Sheffield Insulation Group – that also carries out installation.

3.14 Insulation manufacturers can also distribute their products through DIY sheds or sell to other manufacturers of composition insulation products (where insulation material is integrated with other materials—for example, multifoils for roof insulation). In addition to national distributors, there are several smaller regional distributors and a small number of specialist on-line retailers/distributors. Figure 3.4 illustrates the overall pattern of distribution across different sales channels.
3.15 At the installation level, contractors range from single installers who specialise in small jobs such as loft insulation for individual properties to large firms that can carry out several large insulation projects, for example on housing estates, at the same time. Large installers include Mark Group, Insta Group, Dyson Energy Services, Carillion and SIG Energy Management.

3.16 The insulation supply chain is largely specific to the UK domestic market. While many manufacturers are foreign-owned, most of the production happens in the UK. Transport costs are high because insulation materials - mineral fibre in particular – are bulky. Imports are estimated to account for about 10 per cent of the UK insulation market (including insulation of commercial buildings and industrial insulation). Distribution and

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4 MBD (2011), ‘The UK thermal insulation market development: 2010’
installation firms operate at local and sometimes national level, but not internationally in most cases.

3.17 Because both cavity and solid wall insulation products need to be integrated into a ‘system’, for these applications there is an additional function in the supply chain—the ‘system designer’. System designers bring together different insulation components and ensure that the different parts work well together as a system. They are also responsible for certifying the system and for training and monitoring the installers (see Figure 3.5). We are aware of about 15 cavity wall system designers through our Call for Evidence. Most are either manufacturers (Knauf, Isover, Rockwool) or installers (Insta, Baring, SIG Insulations). Solid wall system designers include Wetherby, Weber, Sto and Alumasc.

Figure 3.5: Illustration of the role of insulation system designers

5 Cavity wall insulation system designers integrate the material that is blown into the wall cavity (blowing wool or plastic beads) and the blowing machine. Solid wall insulation system designers integrate the insulation material (mineral wool or plastic slabs) with render and fixings.
Background on the demand side of the sector

3.18 Domestic insulation can be a valuable commodity – it can reduce households’ energy consumption and energy bills, improving the comfort of their homes.

3.19 Historically however, there have been concerns that private demand for insulation has been lower than might be expected given these benefits. There are a number of possible explanations for insufficient demand for home insulation, including:

- Information asymmetries: consumers cannot easily evaluate the quality of the insulation and its likely impact in terms of energy savings.

- Behavioural biases: consumers may struggle to evaluate investments, such as those in energy efficiency, that provide returns (energy savings) over the very long term. Consumers tend to focus on the short-term costs.

- Repayment period: the time horizon for financial returns (in terms of energy savings) on the initial investment in insulation can be long: up to 30 years for external wall insulation. If they plan to move, consumers may have a shorter time horizon than required for the investment in insulation to be profitable.

- Access to capital: insulation requires an up-front investment, and many households do not have access to the capital—in terms of savings or loans.

3.20 In addition, even if all of these issues could be addressed, individual households would not be expected to take into account the wider environmental externalities of home insulation. The benefits of reduced

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carbon emissions have to be evaluated in terms of global environments—and individual consumers have only a very small private environmental benefit from the insulation that they pay for.

3.21 As a result of these factors, since the 1990s demand for household insulation in the UK has been largely driven by Government interventions aimed at reducing energy consumption and carbon emissions.

3.22 Within the retrofit part of the market, Government intervention has typically taken the form of carbon-reduction targets for energy suppliers. Currently there are two main schemes – CERT and CESP (see paragraphs 3.30 to 3.38 for details). Energy suppliers meet these targets by subsidising the installation of insulation and other energy efficiency measures (such as more efficient boilers).

3.23 Effectively, energy suppliers pay a subsidy to installers to carry out insulation jobs. The subsidy does not always cover all of the cost (although sometimes it does): the amount of subsidy depends on the specific scheme and households’ willingness and ability to contribute to the cost. The amount of subsidy fluctuates with market conditions, which have changed over the life of CERT. (The quarterly volumes of CERT measures are shown later in the report in Chart 6.1).

3.24 In some cases ‘managing agents’ act as intermediaries between insulation installers and energy suppliers, who are the main financers of insulation. Managing agents negotiate contracts with energy suppliers and then look for installers who are available to carry out installation at that rate. Figure 3.6 shows different ways of funding retrofit insulation measures.
3.25 For new build properties, insulation activity is largely driven by building regulations, which over the past decade have required increasingly high energy performance, and by the rate of homebuilding activity, which has been relatively volatile over recent years – as shown in Figure 3.7.
3.26 Figure 3.8 shows how the overall stock of insulation installations has changed over time, how it is projected to change over the next 10 years, and how this maps against the different Government schemes.

**Figure 3.8: Historical and projected number of insulated homes (1976-2022)**


3.27 In very broad terms, the main impact of the Government schemes to date appears to have been to increase the rate of cavity wall insulation, and (to a lesser extent) loft insulation. Levels of solid wall insulation currently remain relatively low. DECC estimate that about 60 per cent of cavity walls and lofts in the UK, but only less than two per cent of solid walls, have appropriate insulation.8

8 DECC (2012), ‘Revised estimates of Home Insulation Levels in Great Britain: April 2012’.
3.28 The Government’s proposed ECO scheme will target subsidy in future more directly to solid wall insulation and ‘hard to treat’ cavities. As a result, the rate of solid wall insulation is expected to grow. More basic insulation (cavity wall and loft insulation) will generally not be eligible for ECO subsidy. Instead, customers will be able to use the Green Deal to help finance insulation measures where the expected benefits exceed the costs. The Government’s intention is that this will reduce the extent to which the sector is driven by targets, and will encourage and facilitate consumers to have insulation installed.

3.29 The possible implications of the Green Deal and ECO on the market are discussed in subsequent chapters of this report.

CERT and CESP

3.30 The CERT requires all domestic energy suppliers with more than 250,000 customers to reduce the amount of carbon dioxide (CO₂) emitted by householders. They are to do this by promoting the uptake of low carbon energy solutions to household energy consumers, thereby assisting them to reduce the carbon footprint of their homes.

3.31 CERT’s primary aim is to make a contribution to the UK’s legally binding target under the Kyoto protocol (a 12.5 per cent reduction in greenhouse gas emissions on levels by 2008-2012) and the Climate Change Act 2008 requirement (an 80 per cent reduction in greenhouse gas emissions by 80 per cent on 1990 levels by 2050).

3.32 CERT was introduced in 2008 and in July 2010 was extended from March 2011 to December 2012, with a new higher target and a new focus on supporting insulation. Sixty-eight per cent of the target increase must now be delivered through professionally installed insulation measures.

3.33 Suppliers must meet 40 per cent of their total target by delivering measures to a ‘Priority Group’ of vulnerable and low-income households, including those in receipt of eligible benefits and pensioners over the age of 70. The extension in March 2011 introduced an additional target: a
requirement for 15 per cent of the savings to be achieved in a Super Priority Group of low income households considered to be at high risk of fuel poverty.

3.34 Energy suppliers meet their obligation either by undertaking the work themselves or contracting with insulation installers and others, typically paying an amount per tonne of carbon dioxide saved over the installation’s lifetime. Installers thereby receive a level of subsidy for each installation and are free to set their own installation price directly with the customer. Most of the measures installed are of loft or cavity wall insulation.

3.35 The cost to suppliers of achieving the CERT targets (from April 2008 to December 2012) was estimated in the CERT Impact Assessment to total £5.5 billion for delivering an illustrative mix of measures. Suppliers are not required to submit information on their actual costs.

3.36 The CESP scheme aims to improve energy efficiency standards and reduce fuel bills for households in areas of low income. CESP is funded by an obligation on energy suppliers and electricity generators. The programme is delivered through the development of partnerships between energy companies and local authorities, social housing providers and other organisations, and can be delivered via a house-by-house, street-by-street approach. This partnership working allows CESP to be implemented in a way that is best suited to individual areas and coordinated with other initiatives.

3.37 Over its lifetime CESP was initially expected to deliver up to £487m\(^9\) of efficiency measures. Up to 100 schemes were expected over its lifetime, which would benefit around 90,000 homes and save nearly 2.9m tonnes of carbon emissions. CESP was expected to deliver annual average fuel bill savings for those households involved of up to £300. In practice, Ofgem has now received 471 schemes to date, and therefore the original prediction of 90,000 homes may have changed.

\(^9\) CESP Impact Assessment: [www.decc.gov.uk](http://www.decc.gov.uk)
3.38 CESP commenced in September 2009 and will conclude at the end of 2012. Unlike CERT, under CESP there are no sub-groups of consumers to be targeted.

**Green Deal and ECO**

3.39 The Green Deal is a new Government initiative being phased in between October 2012 and March 2013 that is designed to facilitate householders installing carbon-saving technologies such as insulation. The scheme is designed so that these consumers incur no upfront costs but are granted a loan to pay for the improvements which is paid back in instalments included in that property’s energy bills over a period of time. The first stage is for a Green Deal assessor to survey the home and report on the improvements that could be made. The ‘Golden Rule’ is that the expected financial savings must outweigh the cost of the improvements for the loan to be granted. The length of the payment period should not exceed the expected lifetime of the energy saving measures.  

3.40 Consumers that want to take out a Green Deal will enter into a contract with a Green Deal Provider. A number of energy companies, insulation installers, DIY chains, high-street retailers and SMEs involved in the energy-efficiency market are expected to become Green Deal providers. A Green Deal Provider will be responsible for delivering the energy efficiency measures, for providing the financing and for dealing with consumer complaints. The Green Deal Provider can contract out several aspects of the Green Deal plan, such as assessment and the actual installation of the measures; it remains, however, ultimately responsible for all the aspects of the plan.

3.41 The new ECO is designed to complement the Green Deal for households. It requires energy suppliers with more than 250,000 domestic customers to provide subsidies to measures that will generate a certain level of

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10 More about the Green Deal can be found here: [www.greendealinitiative.co.uk](http://www.greendealinitiative.co.uk)
carbon or notional bill savings over the lifetime of the measures. There are three such obligations:

- **Carbon Saving**: measures which are cost effective but where Green Deal finance alone will not cover their upfront cost, such as solid wall and non-standard cavity wall insulation.

- **Carbon Saving Communities**: insulation measures in low-income communities.

- **Affordable Warmth**: the provision of measures to low-income and vulnerable consumers which reduce the notional cost of heating the property (including boiler repairs, for example).

3.42 The Government is developing a brokerage mechanism by which Green Deal Providers of these measures can trade installations with energy suppliers. The price to consumers for these measures will incorporate this subsidy received by the Green Deal Provider.

3.43 Ofgem was responsible for monitoring CERT and CESP and has been appointed to administer ECO from October 2012 to March 2015.
4 SUPPLY CHAIN ISSUES

4.1 A first group of issues raised by some respondents to the Call for Evidence related to the supply chain for insulation – covering the manufacturing, distribution and retailing of insulation products. In order for consumers to get a good deal, there needs to be effective competition in the supply chain, with barriers to entry and innovation being as low as possible.

4.2 The Call for Evidence responses suggested three main sets of potential concerns in relation to the supply chain:

- Concerns about whether high concentration at the manufacturing level may limit the strength of competition between firms.

- Some respondents made specific allegations about potentially anti-competitive behaviour in relation to rebates and attempts by manufacturers to influence retailers’ or distributors’ prices.

- Concerns about possible barriers to entry and innovation caused by the product certification process.

Concerns raised about market concentration

4.3 Most of the issues raised about market concentration by respondents related to the manufacturing of insulation products.

4.4 There are three major manufacturers of glass wool insulation in the UK — Knauf, Isover and Superglass — and two major manufacturers of stone wool — Knauf and Rockwool. Another firm, Kingspan, is the only major manufacturer of phenolic foam (a type of plastic foam) in the UK. Only in PIR/PUR and EPS/XPS are there more than three manufacturers of a significant scale currently operating in the UK market.

4.5 The limited number of manufacturers of each specific insulation material suggests a high level of market concentration. However, different materials are, to a certain degree, substitutes. In assessing the degree of competition and levels of concentration in a market, it is important to
understand which products are substitutes and hence how the market should be correctly defined. While we did not attempt to carry out a detailed market definition analysis as part of the Call for Evidence, we asked respondents for information and views on the degree of substitutability between products, and looked at evidence from past OFT merger cases and Competition Commission investigations.

4.6 For each particular application (including loft rolls, blowing material, cavity wall slabs and solid wall insulation systems), a range of materials is available, but some materials will be more appropriate than others. For example, we were told that plastic foams, because of their better insulation qualities, are the preferred solution when the design of the building requires thin cavities. In these cases, the market may be defined in terms of a particular insulation material—as the OFT and the Irish Competition Authority did for PIR in 2011 and 2006, respectively.\footnote{OFT (2011), ‘Anticipated acquisition by Kingspan Group Plc of CRH Insulation Europe, a division of CRH Plc’. Competition Authority (2006), ‘Determination of merger notification M/06/039 – Kingspan/Xtratherm.’}

4.7 In other situations, different materials seem to be good substitutes for the same application: for example installers have indicated that the costs of switching between glass wool, stone wool and EPS beads for retrofit cavity wall insulation are low.\footnote{Competition Commission (2004) , ‘Knauf Insulation Limited/Superglass Insulation Limited merger inquiry’ and response to OFT Call for Evidence.}

4.8 Ultimately a detailed market definition exercise would have to gather evidence on the likely degree of substitution in response to a price change, which we have not attempted within this Call for Evidence.

4.9 In addition, respondents indicated that high barriers to entry in certain of the manufacturing markets (for instance glass fibre), combined with high transport costs, meant that manufacturing markets were unlikely to be highly contestable. Manufacturers said that opening a new insulation manufacturing plant required significant investment, and that importing
insulation from abroad was expensive because of the bulky nature of the product.

4.10 If the relevant product markets are segmented according to downstream application and barriers to entry are relatively high, then some of these markets appear to have relatively high levels of concentration. This appears to be the case in particular for applications for which plastic materials are not seen as a good substitute for mineral wool—for example, retrofit loft insulation.

4.11 Several responses to the Call for Evidence have suggested that there is currently excess capacity in most, if not all, sectors of the industry and that this could serve to reduce the market power enjoyed by manufacturers. However, some respondents told us that this might change in the future if demand increases or if there is a sharp reduction in capacity. The impact of the Green Deal/ECO, alongside a possible revival in construction activity, could increase demand. There is the possibility that this could, in turn, create capacity bottlenecks for some applications (for example, solid wall insulation, which is likely to become a more important focus under ECO).

4.12 The OFT would not typically intervene in a market on the basis of high concentration alone. In the insulation sector, responses to the Call for Evidence suggested that high concentration was driven primarily by the cost structure of insulation manufacturing, including high fixed costs and economies of scale at the plant level. For this reason, a relatively high degree of concentration might be efficient and ultimately generate lower costs for consumers.

4.13 However, high levels of concentration in the market are significant because firms in the market might have the ability to behave anti-competitively in order to exploit their position or exclude potential competitors. This is particularly the case where there are significant barriers to entry and innovation.

4.14 The remainder of this chapter addresses concerns raised by respondents to the Call for Evidence which are relevant to this two point.
Concerns raised about alleged anti-competitive behaviours

4.15 Respondents to the Call for Evidence raised a small number of concerns about potentially anti-competitive behaviour.

4.16 First, some respondents raised concerns about manufacturers’ pricing practices and the use of rebates to distributors and retailers.

4.17 As with many similar upstream product markets, we were told that prices paid to insulation manufacturers by distributors were typically individually negotiated and that actual prices paid are often heavily discounted from the list price.

4.18 Some concerns were expressed to us that volume-based rebates by the largest manufacturers could exclude competitors by locking in distributors to purchasing from a single supplier.

4.19 The OFT is not currently minded to investigate these concerns further for the following reasons:

- The extent of the volume-based rebates appears small compared to other types of ‘guaranteed’ rebates (that is, rebates that are not linked to volumes). We received evidence to suggest that the majority of the rebates paid by large manufacturers took the form of monthly discounts, and were not linked directly to volumes sold. This would limit the effect to which the rebates might incentivise distributors to source their supplies from a single manufacturer.

- We did not see clear evidence that rebates were having an anti-competitive effect on the market by driving out competitors.

4.20 Volume rebates are only likely to lead to foreclosure, and to harm competition, where used by a dominant manufacturer. In other cases rebates can intensify competition.

4.21 Second, some respondents to the call for evidence suggested that some manufacturers had attempted to introduce Resale Price Maintenance (RPM) agreements. An RPM agreement involves a vertical agreement between two businesses at different levels of the supply chain. This
could include an insulation manufacturer/importer selling an insulation product to a distributor. An RPM agreement is formed when the manufacturer/importer imposes a resale price on the distributor. In other words, the distributor cannot set his own price to resell the insulation to an installer or member of the public.

4.22 Anti-competitive agreements in the UK infringe Chapter I of the Competition Act 1998, and can lead to fines for companies that enter into them. RPM agreements are generally considered to be anti-competitive, as they prevent the reseller from setting his own price for the product, and can therefore dampen price competition. The OFT received a complaint from an insulation distributor that a manufacturer had attempted to impose an RPM agreement on it. The OFT was also informed by another distributor that it had been approached by a manufacturer and asked to increase its prices. Although neither of these complaints provided evidence of RPM agreements actually having been entered into, the information received raises concerns that there may be such agreements in place in the insulation industry.

4.23 Respondents to the Call for Evidence also informed the OFT of another vertical agreement. We were informed that one insulation manufacturer is in a long-term exclusive supply agreement for its cavity wall product. The manufacturer is unable to supply cavity wall insulation to any other installer, and is able to offer innovative new cavity wall products to that installer only. As the manufacturer can supply its cavity wall product to one customer only, it may be difficult for that manufacturer to achieve the most efficient economies of scale.

Actions and recommendations

4.24 In response to the alleged RPM issue, the OFT wrote to the manufacturer in question to remind them of their responsibilities under competition law. The party wrote back to the OFT to confirm that it is not a party to any such agreement, and that it has now written to its staff to ensure that they do not act in a way which could give rise to such concerns.
4.25 The OFT recommends that all insulation manufacturers, importers, distributors, retailers and installers review their contracts with other businesses in the supply chain to ensure that they are not party to an RPM agreement in breach of Chapter I of the Competition Act 1998. Any party that considers that it is party to such an agreement should seek legal advice immediately, and should consider approaching the OFT with full details of the agreement.

4.26 We will keep a watching brief on the market and investigate any complaints about potential anti-competitive conduct or agreements that we receive.

Concerns about product certification and innovation

4.27 One of the areas highlighted by a significant number of respondents to the Call for Evidence was the process for certifying insulation products and systems.

4.28 Robust standards, testing and certification are vital safeguards to give consumers confidence in the quality of insulation products that are being installed in their homes. There was widespread agreement from respondents that the current arrangements for product testing and certification were effective in preserving product quality in the market.

4.29 The majority of the UK requirements are based on EU standards and certification regimes. DECC has told the OFT that it believes that most insulation companies operating in the market already have the certificates which would enable them to operate in the Green Deal market.
Some manufacturers, distributors and installers of insulation material argued that there is a lack of effective competition in the market for providing certification services for insulation products. We were told that the provider in the market with the biggest market share – the British
Board of Agrément (BBA) – appears to have less incentive to act as efficiently as it might were it to face strong competition.

4.31 Concerns expressed about the BBA by some participants in the Call for Evidence included:

- Delays in carrying out certification work—we were told that some products take more than a year to be certified, and that some respondents considered that delays were sometimes caused by slow and bureaucratic procedures, rather than the time required to carry out technical tests.

- The apparently high level of charges for certifying innovative insulation products.\(^{13}\)

- Some manufacturers alleged that the BBA, against its own stated policy, does not always accept testing evidence provided by other laboratories.

4.32 Some international manufacturers have also complained that they are at times unable to use certification obtained in another European country to market their product in the UK because ‘specifiers’ (see paragraph 4.38) require a BBA certificate even though, in most respects, it replicates the testing carried out for the foreign certificate.

4.33 Many manufacturers also said that the testing carried out by the BBA is thorough and allows people to buy their product with confidence – something which was broadly supported by other respondents to the Call for Evidence.

4.34 The BBA provided evidence to the OFT as part of the Call for Evidence.

\(^{13}\) Some respondents told us that BBA certification costs typically around £30,000. The BBA commented that the average cost for certification of solid wall insulation is below £20,000. The process is quicker and less expensive for long-established products that only require a renewal of an existing certificate.
• It pointed out that manufacturers should engage in the testing/certification process earlier in the product development cycle, and that some of the delays incurred by manufacturers could be avoided by better preparation by those manufacturers.

• The BBA is aware of the industry’s concerns and it has stated that: a) it is already working with the insulation industry to find ways of improving efficiency; and b) it has invested in equipment and staff to deal with increased demand.

• The BBA has stated that it has a clear policy for accepting testing data from other laboratories, and that in the majority of certifications part of the data comes from another laboratory. The BBA only rejects data when it has concerns that the product sample is not representative, and in some cases if it requires additional information.

4.35 The BBA has also suggested that, because of the investment needed in equipment and technical staff, the UK market for insulation certification may be too small to sustain several integrated firms with the ability to carry out all the testing and the assessments required by specifiers. The BBA believes that the situation is similar in other European countries: DIBt and CSTB appear to face limited competition in the German and French markets, respectively.

4.36 The OFT’s understanding, based on responses to the Call for Evidence, is that there is no regulatory constraint on new certification bodies entering the market. Insulation products are not required by law to be certified by the BBA: they can be brought to market with an alternative certificate or even with no certificate at all. Certification is not required as building regulations are ‘functional’: they specify certain results, such as the level of thermal performance of a building, not how the results are achieved.14

14 Building regulations are devolved to Northern Ireland, Scotland and Wales, but in all cases the ‘functional’ approach applies.
4.37 The BBA estimates that there are at least four other bodies that certify insulation products in the UK, and several others abroad.\textsuperscript{15} UKAS accreditation for insulation testing and product certification can be obtained by other firms by following a standard evaluation process. DECC has told us that it expects more certification bodies to enter the market following the introduction of the Green Deal and ECO; that some certification bodies have already started providing services for installations; and that they may extend their scope to product testing. Other respondents have stated that the number of bodies offering product certification for insulation has been stable over the years.

4.38 As part of the Call for Evidence we were told of a few manufacturers seeking certification from bodies outside the UK, but these appear to be exceptions. So far cross-border competition does not seem to have provided practical alternatives to UK certification bodies.

4.39 Several manufacturers and other parties considered that without a BBA Agrément certificate it was difficult to find buyers for innovative insulation products.\textsuperscript{16} We were told that product ‘specifiers’ (designers and procurement professionals that define the specifications of the insulation to be installed) nearly always ask for products that carry certification from the BBA.

4.40 Several factors have been suggested to us to explain why BBA certification has become embedded in industry practice:

\textsuperscript{15} The UK Accreditation Service (UKAS) lists 13 certification bodies which currently hold accreditation specifically for insulation, and 68 testing laboratories for ‘insulation’. However, these figures include certification bodies and laboratories that do not focus on thermal insulation for buildings.

\textsuperscript{16} According to the BBA, commodity materials such as rolls for loft insulation are generally not BBA approved and often declare performance via CE marking from other certification schemes such as BSI’s Kitemark.
• The original role of the BBA as a public body (set up to assess and certify how novel products could be installed in ways that matched the regulatory requirements).

• The brand value developed over the years by the BBA.

• The complexity for specifiers of comparing the quality of alternative certification bodies.

• Risk aversion of the specifiers who are concerned about their own professional liability.

• The erroneous expectation that building control bodies (who check compliance with Building Regulations) will only accept a BBA certificate.

4.41 From 1 July 2013, the implementation of the European Construction Product Regulation (305/2011) (‘CPR’) will make the marking of European conformity (CE markings) mandatory for most existing construction products to be put on the market in the UK.17

4.42 Unlike the BBA Agrément certificate, the CE marking is a neutral label not owned by a specific certification body. Competition between certification bodies may increase if specifiers of insulation products increasingly referred to a neutral label such as the CE marking.

4.43 There are, however, three potential problems with the use of CE markings themselves as the prevailing neutral label for specification of insulation products:

17 Mandatory CE marking is a new requirement in the UK, but the CE marking system for construction products is well established under the existing Construction Products Directive, and many products on the UK market are already voluntarily CE marked against harmonised EU product standards. Some construction products do not fall under a harmonised European standard and will not have to be CE marked.
• CE marking is only voluntary for innovative products that are not covered by European harmonised standards—including solid wall insulation systems.\textsuperscript{18}

• CE marking has a more limited scope than BBA certificates, which provide an assessment of compliance with local building regulations and may cover additional aspects that are relevant for specifiers (for example, aesthetics, durability, installation).\textsuperscript{19}

• For the most innovative products, a new European assessment methodology needs to be developed to assign a CE marking. Certification alternatives that do not require EU-wide coordination may be quicker to market innovative products in a single country.

4.44 As a result, specifiers are likely to continue requiring other assessments after the introduction of the CPR, either instead of CE markings (as they do now with BBA certificates) or in addition to the CE markings (for example, if specifiers required a separate assessment of regulatory compliance). For a product which falls within the scope of a harmonised standard, or a product for which an ETA has already been issued, the CPR\textsuperscript{20} forbids the use of extra labels if these do not provide any additional information compared to the CE marking.

4.45 In addition to the concerns about competition in the UK certification market, we have received complaints by some testing bodies and

\textsuperscript{18} Manufacturers can use the CE marking for innovative products by obtaining a European Technical Approval/Assessment (ETA) based on European testing guidelines.

\textsuperscript{19} CE marking for construction products is a consistent way of expressing a product’s technical performance, but local regulation will still define what levels of performance are required within a country and for a particular intended use, to reflect local climatic conditions, for example. This means that, even for a CE marked product, the user or specifier will still need to use the information provided with the CE marking to assure them that the product is suitable for their intended use and the finished works will comply with local regulations. The BBA certificate includes a judgement on compliance with local regulations.

\textsuperscript{20} Article 8(3).
manufacturers about the EU testing standards for insulation products. They claim that the laboratory-based ‘hot box’ test embedded in EU standards may not be the most appropriate method to capture the benefits of certain innovations. The OFT is not in a position to assess whether this is fair criticism or not, but in our view, testing practices should not be a barrier to innovation.

**Recommendations and progress made to date**

4.46 The OFT is aware that confidence in a strong certification regime is dependent on having robust standards, testing and certification, and none of the recommendations below are intended to undermine that important aim.

4.47 Based on responses to the Call for Evidence, we understand that the current regulatory framework would allow new certification providers to emerge. However, in practice the main existing incumbent, the BBA, appears to have a very strong position, because of a combination of brand strength, technical ability and other incumbency advantages. The OFT considers that the market would benefit from encouraging stronger competition in the provision of certification services for insulation. This would bring industry practice more in line with the regulatory framework.

4.48 One way of facilitating greater competition might be for the certification label to be more clearly independent of the provider of certification services. This would mean that new providers could apply a neutral industry label, reducing the brand advantages of the incumbent.

4.49 As previously mentioned, some respondents to the Call for Evidence argued that, even with CE markings, there may be still reasons for those in the market to want a different certificate. However, the CE marking, as a neutral label (the label certifying the level of performance is separate from the certification body), encourages competition and reduces the reliance on incumbent certification bodies. We would encourage the Government to consider ways of promoting competition and choice in certification—in particular within the Green Deal/ECO schemes.
4.50 The OFT intends to engage specifiers and their associations to promote procurement practices that do not advantage a specific certification body, but focus on neutral labels. We plan to write to both private sector associations and public sector associations and will ask the Department for Communities and Local Government to engage with Building Control bodies on the same issues.

4.51 In addition to the separation of the certification label from the body applying that label, the OFT considers that competition would also benefit from a clear separation between certification and testing. A certificate requires different tests, and it may be that some manufacturers may prefer to have part of the testing carried out by bodies other than the one that issues the final certificate. Certification bodies should commit to accepting testing data from other suitably accredited laboratories. As outlined above, this is already the policy of the BBA. However, there may be steps that could be taken to raise awareness of this policy.

4.52 Third, some respondents to the Call for Evidence suggested that the additional requirements of UK (England, Wales, Northern Ireland, Scotland) Building Regulations were difficult for new entrants to become fully aware of and understand, which gave an advantage to incumbent certification bodies. The OFT appreciates that the building regulations perform a very important function, and it is for Government to determine the appropriate degree of protection provided by them. However, Government should be aware of the potential entry costs created by the regulations and attempt to keep the guidelines related to insulation as simple as possible.21

4.53 Government should investigate further what practical steps could be taken to support the insulation industry in purchasing certification

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21 Under the Construction Products Directive DCLG will have to produce a website that lists all the requirements relating to construction products – a ‘product contact point’ – which is aimed at providing info for those seeking to sell into the UK market. Statutory guidance for the Building Regulations is publicly available on the Planning Portal.
services, for example by providing guidance for the industry on alternative certification routes, or to explore what more can be done to encourage more certification bodies to enter the market.
5 DEMAND FOR INSULATION AND THE IMPACT OF ENERGY SUPPLIER TARGETS

5.1 A second set of issues raised by respondents related to fluctuations over time in the demand for insulation, and the impact this has had on prices in the market. This chapter sets out:

- Evidence provided by respondents suggesting how volumes and prices have changed under CERT and CESP - including an increase in demand in recent months as the deadlines for meeting energy efficiency targets approach.
- Possible reasons for movements in demand and prices, including the behaviour of energy suppliers and insulation installers in the market, and the impact of the CERT and CESP schemes.
- Recommendations for mitigating similar issues in the future.

Evidence on volume and price movements

5.2 Ofgem collects data on the number of insulation measures installed over time which are funded by the CERT and CESP schemes. Figure 6.1 summarises this information in terms of the number of measures installed under the CERT scheme between 2008 and early 2012.

5.3 As shown in Figure 6.1 (and in the analysis in Chapter 3), insulation volumes have been relatively variable on a quarter-by-quarter basis for the period of the CERT scheme. The volume of cavity wall insulation measures fell from 172,000 in Q2 2009 to 84,000 in Q3 2010 and then returned to 170,000 in Q1 2011. Professional loft insulation installations (excluding DIY installations) fell from 227,000 in Q1 2009 to 103,000 in Q3 2010, and then rebounded to 302,000 in Q1 2012.

22 CERT and CESP schemes represent a large majority of retrofit installations of insulation in homes. These figures do not include insulation of new build homes.
5.4 In contrast to data on volumes, information on prices paid by energy companies to installers is not publicly available because contracts are individually negotiated between energy companies and insulation installers. However, we received some anecdotal evidence on price from energy suppliers in response to the Call for Evidence.

5.5 While the OFT did not attempt to verify this information as part of this Call for Evidence, one energy company informed us that charges made by installers over the CERT programme period had increased by 13 per cent since the CERT extension came into effect in July 2010. The same company forecasts that the total price increase over the life of the CERT extension (July 2010-December 2012) may be as high as 34 per cent. The OFT has not seen evidence of prices in earlier periods to provide a comparison with more recent figures.

5.6 A number of energy companies argued that the reason for the price increase was that installers were raising prices in the knowledge that
they had a guaranteed buyer (because energy suppliers are required to meet their energy efficiency targets over the period of the CERT and CESP schemes). They informed us that they were not aware of any supply-side factors (such as cost increases) which would support such a price rise. Some installers also explained that increased search costs, which are discussed further below, were a factor where prices had increased.

5.7 Another energy company informed the OFT that it predicts the amount it will pay installers will increase by between 50 and 100 per cent between March and November this year. As with other price statistics, the OFT has not sought to verify this information, and has not seen evidence of prices in earlier periods to provide a comparison with more recent figures.

5.8 From the information we received, it appears that there have been increases in prices paid by energy suppliers for installations particularly over the later months of the CERT and CESP schemes. Limiting demand fluctuations should help the supply side (installers and manufacturers) to plan ahead and invest in meeting future demand.

Possible drivers of volume and price fluctuations

5.9 A number of respondents, particularly energy companies, argued that one of the main reasons for increased cost of installations was the inelastic demand from energy companies obliged to meet their targets by the end of the CERT and CESP periods. They asserted that, as the energy companies demand more installations, installers are able to capitalise and charge higher prices. As they approach the end of the obligation periods companies may also have to go to greater lengths to attract customers. For example, we were told that some suppliers were paying super-priority group customers £100 or more to persuade them to have insulation installed.

5.10 In a normal market we might expect to see the increase in demand for installation services being met by installers expanding or new ones entering the market. However, we have been told by both installers and their representative bodies that some energy companies were slow to
start fulfilling their obligations under CERT. As a result, installers had less business than they expected for the first year of the scheme, and some exited the market while others contracted in size.

5.11 As energy companies have started demanding installation work, installers have taken on more staff and carried out more jobs. However, respondents informed us that installers are reluctant to take on more staff towards the end of the scheme because volumes might fall at the end of the scheme (particularly in relation to cavity wall insulation), leaving the installer with many staff but little work. This is likely to have exacerbated the problem of demand for installation services outstripping the ability of installers to supply the service.

5.12 In the view of some installers, the slow start made by some energy companies towards fulfilling their CERT and CESP targets forced installers to lay off employees and reduce their capacity. Installers report that when energy companies accelerated the pace, they had to face a rapid increase in demand with reduced capacity—which put pressure on prices.

5.13 However, a number of energy companies responded to the OFT by saying that their slow start to fulfilling their obligations was in part due to the lateness of Government in finalising the scope and form of the CERT scheme. Without a clear idea of what their obligations were, some energy companies claimed that they did not prepare in advance as much as they could have done. While this was brought to our attention by a number of energy companies, it must be noted that a number of companies are on track to meet their obligations under both the CERT and CESP schemes.

5.14 We were also informed by some respondents that short term targets may have had an effect on the ability of some energy companies to deliver their obligations. The DECC study ‘Evaluation of the Community Energy Saving Programme’ noted that some stakeholders considered

the three-year CESP timeframe too short and too challenging. It also reported concerns over the length of time taken by the scheme approval process. The report mentioned long delays between initial scheme submissions by energy companies and scheme approval by Ofgem.

5.15 Ofgem told the OFT that it considered that the complexity of the CESP scheme, rather than the administrative process itself, was the major factor behind the length of time taken in getting schemes approved. Ofgem also pointed out that the number of schemes submitted was greater than originally anticipated. Evidence from Ofgem shows that by July 2012 471 schemes had been submitted, up from the 100 estimated by DECC at the beginning of the scheme. To date, just over 200 of these schemes have been approved.

5.16 In addition to the greater than expected rate of scheme submission, Ofgem informed us that all parties have faced challenges with the delivery and administration of a complex programme. Ofgem has told us that it has worked with industry and Government to overcome many of these challenges. For example, it established a CESP Technical Working Group to address many of the complex technical issues, such as the treatment of hard to treat cavities with solid wall insulation, as well as introducing a reconciliation process for glazing so that obligated parties could claim glazing measures that otherwise would have been claimed under the CERT programme. The result of this work has seen scheme approvals rise significantly.

5.17 Finally, some respondents highlighted the impact of specific sub-targets within the CERT and CESP schemes. The CERT scheme originally consisted of two groups of consumers; the Priority Group and the non-Priority Group. In July 2010 the targets for the CERT scheme were extended, and a further target group was added: the Super Priority Group. A number of respondents have informed us that, by having these sub-targets, search costs have increased exponentially. The search costs have risen as it has become progressively more difficult to identify customers in the smaller groups, notably the Super Priority Group. One unverified estimate provided to the OFT was that search costs for Super
Priority Group customers would be 30 – 50 per cent higher than for non-Priority group customers.

5.18 CESP is designed to deliver comprehensive, street-by-street, energy efficiency retrofits to specified low income areas, representing the 10 per cent lowest income areas in England (15 per cent in Scotland and Wales). These eligible areas were identified using the Index of Multiple Deprivation which breaks the geography of Great Britain down into Lower Super Output Areas (LSOAs) or Data Zones in Scotland. Unfortunately the boundaries of LSOAs and Data Zones can have the effect of meaning one half of a street is eligible for CESP but not the other half (installation outside of the specified LSOAs cannot be claimed under CESP). Similarly some housing estates are split in half with some part in an eligible LSOA while the other part is not. As a result, houses which would have benefitted from insulation have not been offered it under CESP, and it may well be that CESP prices could have risen as providers have had to search for other eligible LSOAs, instead of extending their existing CESP scheme to cover the other half of the housing estate.

Conclusion on volume and price changes

5.19 On the basis of the information we received through the Call for Evidence, the price increases appear to have been primarily driven by a mixture of:

- Increases in demand from energy suppliers as they move towards the deadline for meeting CERT targets. In several cases energy suppliers appear to have had low installation rates during the first part of the CERT period, with the result that they have had to sharply increase their rate of installation over later months. This increase in demand appears not to have been matched by an increase in installation capacity in the market (that is, there has been a lack of supply side response).

- Increasing search costs for installers and energy suppliers in finding appropriate properties in which to install insulation. In part this simply reflects the fact that as more houses are fitted with
insulation, it becomes harder to find un-insulated properties that fit the scheme criteria. Sub-targets within the CERT scheme may also have increased search costs for certain groups.

- Some attempts by installers to push for higher prices from energy suppliers. However, we did not receive any evidence of coordinated behaviour on the part of installers.

- The relatively short duration of the scheme leading to fluctuations in the capacity of installers, which in turn means that installers in the market raise prices while their services are in demand.

Possible implications for ECO

5.20 The ECO scheme as currently planned has similar features to the CERT and CESP schemes. The ECO scheme is planned to run for a finite period of time (10 years but with interim three-year targets) and will require a certain level of demand resulting from energy companies' obligations under the scheme.

5.21 The OFT’s view is that the risk of demand and price fluctuations is likely to be lower under ECO than under CERT and CESP. This is because:

- Unlike the CERT and CESP schemes, which covered a large proportion of retrofit insulation installed in the UK during their period of operation, the ECO scheme will operate alongside the Green Deal.

- Unlike with the CERT and CESP schemes, the ECO scheme is planned for a long period (10 years as opposed to three). This should help to increase certainty for installers in the market about the future direction of the targets, to allow them to plan ahead and adjust capacity in anticipation of future changes in demand.

5.22 In addition, search costs for installers and energy suppliers should be lower under the ECO scheme because:

- The Government intends to introduce a brokerage system to facilitate matching of ECO credits with installations.
The ‘sub-targets’ within the ECO scheme cover larger groups of potential households than the Super-Priority Group’ under CERT, so search costs for installers and energy companies in identifying these households should be lower.

5.23 Nevertheless, there are some remaining concerns that some features of ECO may lead to some volume and price fluctuations. These features include the use of interim targets of a relatively short duration (two and a half years), which may be exacerbated if energy companies start to plan for the introduction of ECO late.

Recommendations and progress already made

5.24 The OFT has identified a number of measures—set out in the following paragraphs—which we would encourage DECC to include in its arrangements for introducing the Green Deal and ECO, and which we believe will increase certainty for participants, allowing them to plan ahead and hence reduce the risk of volume and price fluctuations. These are consistent with the OFT’s wider work on how subsidies can be designed to minimise distortions of competitive markets.24

5.25 We consider that there should be greater incentives for energy companies to meet their obligations. One way to achieve this would be through increased transparency of the performance of the obligated energy companies. For example, Ofgem might be required by legislation to chart the performance of individual energy companies against their obligation under ECO for installing insulation and to publish this information. Under the ECO scheme Ofgem will have a duty to report monthly to the Secretary of State for Energy and Climate Change. We would encourage Government to empower or require Ofgem to publish these monthly reports under ECO in order to incentivise the energy companies to fulfil their obligations promptly.

24 For wider guidance from OFT and HM Treasury on how to assess the competition effects of public subsidies, see: www.oft.gov.uk/shared_oft/reports/comp_policy/of829.pdf
In addition, although the initial ECO targets have been committed to by DECC, we understand that there is some flexibility over scheme design for the remainder of the ECO period. With the aim of trying to create the greatest amount of certainty for participants and minimising the risk of price and demand fluctuations, the following ideas might be considered:

- Consideration might be given to overlapping target periods. This might involve winding down the original three-year target at the same time as building up the subsequent three-year target. As an example, the first three-year target could be wound down from December 2015 over a period of six months, ending in June 2016, while the subsequent target could start in December 2015 and gradually build up until it was fully introduced by June 2016. This would avoid the ‘cliff edge’ associated with moving from one set of targets to a different set of targets, thus reducing the risk of building up capacity then having it tail off well in advance of the end of a scheme.

- Under the transition of CERT and CESP to ECO, DECC has allowed obligated energy companies to over-recover qualifying measures in one scheme to be rolled into the following scheme. We understand that DECC are considering allowing this for targets within the ECO scheme, and would encourage that.

- Announcing Government targets in advance of (for example, 12 months before) the start of the scheme. A number of respondents mentioned that a lack of clarity over targets prevented them from fully committing to delivery until later than they would have liked. Greater forward commitment would allow energy companies and installers to plan their activity with certainty in advance of the start of a project and be ready to go when the scheme starts.
6 QUALITY OF INSULATION AND INSTALLATIONS

6.1 A third set of issues raised in responses to the Call for Evidence related to quality of insulation and potential problems with installation. These concerns fell into three main groups:

- Whether the most appropriate, cost-effective insulation is being installed in a particular home.
- Risk of installation of insulation in houses for which it was unsuitable, making them more susceptible to damp (resulting in damage to the building fabric and furnishings).
- Whether installation is carried out to an acceptable standard, so that the insulation achieves the expected energy efficiency benefits.

Evidence provided by respondents

6.2 Some respondents, including some manufacturers and some building professionals, noted that standard insulation materials were sometimes used where more expensive, specialist materials would be more appropriate (and cost effective in the long-run). Related to this, some respondents reported that installation of unsuitable insulation in homes can make them more susceptible to damp (resulting in damage to the building fabric and furnishings).\(^{25}\)

6.3 Furthermore, some respondents raised concerns about whether installation of insulation was carried out to an appropriate standard. In relation to installation, a number of responses, including some from consumers, from a building professional and from a local authority, provided examples of insulation materials being poorly installed in

\(^{25}\) Consumer magazine *Which?* reported in April 2011 that it had invited eight companies to assess for cavity wall insulation (CWI) a house that its expert surveyor deemed unsuitable for this due to cracks in the external walls and its location in an extremely wet and exposed area – factors which industry guidelines warn could lead to damp in houses with CWI. All eight said the house was suitable for CWI and none warned that CWI might put the house at risk from damp.
houses, with the result that some houses are not as well insulated as they should be.

6.4 The monitoring of installations under CERT and CESP, overseen by Ofgem, records installation failures against a set of tests. Some types of failures will not lead to a reduced level of carbon saving being achieved, such as the failure of the installer to provide a CIGA guarantee. Others may lead to a reduction in the level of carbon savings being achieved. All the major failures recorded under this technical monitoring, (or through other sources) are rectified by the obligated energy companies.

6.5 Ofgem has provided the OFT with data on the rates of failure for installations carried out for both cavity wall and loft insulation under the CERT and CESP schemes. We have not been able to compare this data with failure rates for installations not carried out under the CERT and CESP schemes (the market for such installations is very small).

Figure 6.1: Aggregate technical monitoring results – Cavity wall insulation

<table>
<thead>
<tr>
<th>Measure Specific Question</th>
<th>Q15 Fail Rate (%)</th>
<th>Q16 Fail Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the work guaranteed by a CIGA warranty?</td>
<td>10.1%</td>
<td>5.1%</td>
</tr>
<tr>
<td>If not, has another form of guarantee for 25 years been provided?</td>
<td>1.0%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Does the drilling pattern used ensure that the insulation material is distributed as evenly as possible throughout the cavity?</td>
<td>2.0%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Have the injection holes been made good?</td>
<td>3.4%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Are all the air bricks and eaves vents clear of insulation material?</td>
<td>2.7%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Have the air bricks been sleeved to prevent material moving in the cavity and blocking the vent at a later date?</td>
<td>2.5%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Are all air vents particularly those for combustion appliances clear of insulation material?</td>
<td>0.2%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>
Figure 6.2: Aggregate technical monitoring results – Loft insulation

<table>
<thead>
<tr>
<th>Measure Specific Question</th>
<th>Q15 Fail Rate (%)</th>
<th>Q16 Fail rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the insulation marked for 'DIY use only' or dyed a specific colour?</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Does the material comply with BS 5803 Part 1: 1985</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Thickness of original insulation (mm)</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total thickness of insulation (mm)</td>
<td>1.6%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Has two thirds of the total loft area been insulated? - If not, approximately what proportion has been insulated?</td>
<td>0.7%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Has insulation been applied to all appropriate areas including (i) beneath boarded areas and (ii) if the water storage tank is on the joists, around but not beneath the tanks; or if the tank is elevated, around and beneath the tank.</td>
<td>2.9%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Has the loft hatch been fitted with effective draught seals?</td>
<td>4.3%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Has the loft hatch been insulated?</td>
<td>2.9%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Is the roof space adequately ventilated?</td>
<td>1.2%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Have additional vents been fitted if required?</td>
<td>0.4%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Have the pipes and tanks been insulated to an adequate standard?</td>
<td>7.3%</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

Source: Ofgem

6.6 While some of these relatively easy-to-identify failures may not impact on the long-term energy efficiency of the insulation, there is a concern that, on average, poor installation will lead to lower-than-expected energy savings. Some respondents told us that the changes in energy consumption after insulation was fitted were not as large as might have been expected, and that this may be partly due to the poor quality of installations. It is difficult to quantify the effect of these technical issues on the carbon saved. However, DECC commissioned research to compare the actual amount of carbon saved following the installation of insulation with that derived by models. This found that a 50 per cent reduction factor should be applied to the insulation scores and this reduction factor is currently used in the schemes. This factor would make an allowance for a range of issues including the poor quality of installations.
Possible causes of the quality issues raised

6.7 Respondents suggested a number of different reasons why these quality issues might arise.

6.8 Consumers typically do not know about different insulation products, and rely on installers to recommend appropriate products. Insulation is also, to some extent, a ‘credence good’ – that is, its quality is hard to observe even once it has been installed. Although consumers should experience benefits through lower energy use, this might be difficult to check because energy use fluctuates from month to month.

6.9 Perhaps even more importantly, if poor installation causes problems with damp, these may not become evident until a year or more after installation. Monitoring, which is typically done in the weeks following installation, cannot identify these longer-term problems.

6.10 A number of responses to the Call for Evidence commented on the impact of CERT and CESP on consumer engagement:

- Although neither the CERT or CESP schemes require a subsidy to be provided, obligated energy companies often provide insulation installation for free, or at a heavily subsidised price. This means that consumers may have less incentive to engage actively in the purchase than if they were paying the full market rate.

- Some consumers may have been under the impression that work carried out under CERT and CESP was done so either directly by the Government, or under the direct control of the Government (a number of consumers responded to the Call for Evidence saying that they had been told by installers under the CERT scheme that they were calling 'on behalf' of the Government).

6.11 Alongside this relative lack of consumer engagement, some respondents also argued that, while energy suppliers have strong incentives to meet targets for the quantity of insulation installed under CERT and CESP, their incentives to ensure it is appropriate and it is installed well are weaker. Since suppliers’ performance against targets depends on the
quantity of measures installed (in compliance with the applicable standards and regulatory requirements), there appear to be few incentives on them to install the highest-quality measures, or ensure that installation is of the highest standard. DECC pointed out that CERT and CESP are market-based mechanisms designed to drive cost-effective delivery, and that that the use of more costly products has the potential to increase the impact on customers' bills.

6.12 Under the current CERT and CESP schemes, there are potentially three main channels through which energy suppliers might be incentivised to raise the quality of installation, namely:

- Consumer redress through complaints and any concomitant bad publicity that might earn the energy suppliers a reputation for poor quality.

- Regulatory monitoring by Ofgem of the quality of installations and publicity given to this.

- Sanctions on energy suppliers for poor quality installations, for example either financial penalties or reduced carbon credits.

6.13 In relation to consumer complaints, there appears to be a lack of clarity for consumers about who is ultimately responsible for the quality of installation (whether the installer or the energy supplier). In some cases we were told that consumers were not aware of the energy supplier’s involvement because installation had been subcontracted to an installer. These issues are covered in more detail in the next chapter.

6.14 In relation to regulatory monitoring, Ofgem requires the energy suppliers to inspect five per cent of installations and provide a summary of these inspections to Ofgem.

6.15 This data enables Ofgem to challenge energy suppliers where their failure rates appear high, and Ofgem has the power to remove or reduce carbon savings based on technical failures. However, it has not previously published this data (and there is no requirement for it to do so).
6.16 Responses to the Call for Evidence indicate that administration and monitoring processes under CERT and CESP schemes appear to have not always led to incentives to install good quality insulation and to install it well. We were told that this may have led to poor quality installations, and unsuitable insulation materials being installed in some homes. On the basis of technical monitoring data collected by Ofgem (see tables 6.1 and 6.2) it is difficult to estimate the total proportion of houses that may contain poor quality insulation, and to quantify the effect of these technical issues on carbon saved. And, while the problems which were identified through the monitoring process (covering around five per cent of installations) would have been corrected, it is less likely that the 95 per cent of installations not part of the monitoring process will have had any problems identified and corrected.

**Extent to which these concerns apply to the Green Deal and ECO**

6.17 A number of the concerns about quality of insulation have the potential to be reduced under the Green Deal and ECO.

6.18 Most significantly, the Green Deal is aiming to stimulate more active consumer engagement, since consumers will choose to have insulation (and other) products installed at competitive rates, unlike under CERT where many consumers were offered subsidies.

6.19 The new policy framework should also encourage consumers and installers to consider the most appropriate insulation solution for each household. In particular, the Green Deal and ECO schemes should incentivise better quality measures being installed in so far as these lead to greater energy savings. Whether they are installed in preference to cheaper measures will depend on whether they are more effective in relation to the cost (and whether they continue to meet the Golden Rule) taking into account ECO subsidies.

6.20 In addition, the Green Deal Code of Practice will put in place new protections and requirements on installers and Green Deal Providers. While some of the detail of how this is to be achieved is yet to be finalised, will include these features:
• The Green Deal Code of Practice specifies that the risk of damage to the building fabric should be ‘minimised’ and the risk of interstitial condensation or moisture build-up should not be increased to the point where fabric decay or pathologies affecting human health might be caused.

• The Green Deal Code of Practice mandates that participants in the Green Deal must not make statements which suggest that they are recommended or approved by Government, or that they are working with, in conjunction with or in association with Government. This should help to address the concern expressed to us by some respondents that some consumers may be under the impression that work carried out under the Green Deal is done so either directly by the Government, or under the direct control of the Government.

6.21 Finally, the Government is setting up a Green Deal Registration and Oversight Body to manage the Green Deal Code of Practice and this will monitor the performance of Green Deal participants to ensure compliance with the Code. We understand this means that it will undertake inspections of measures installed, and the oversight body will have the power to remove a Green Deal registered installer from the Green Deal scheme if appropriate. Its reporting function will include plans for improving consumer satisfaction levels and the contents of the Green Deal Code of Practice. Ofgem is to administer the ECO scheme, including putting in place arrangements for the monitoring of installations.

6.22 Nevertheless, in spite of these positive changes, some of the concerns raised by respondents to the Call for Evidence might be expected to continue under the Green Deal and ECO.

6.23 The ECO scheme is structured in a similar way to the CERT and CESP schemes (demand is based on the energy companies installing quotas of insulation) and might be expected to create similar incentives for quantity of insulation rather than quality. While Green Deal Providers have a commercial incentive to make sales, energy companies have the additional incentives under ECO as they did under CERT of potential
financial penalties if they don’t meet their obligations. Where consumers’
insulation is fully-funded by ECO, the situation will be very close to the
current arrangements under CERT and CESP.

6.24 Where installations are funded by ECO subsidy only and there is no
element of Green Deal finance the Green Deal Code of Practice does not
apply, and there appear to be no consumer protection measures in place
(beyond those which apply to insulation installations generally and all
products and services sold to consumers). Therefore the same issues
may arise for these installations as arose previously under CERT.

Recommendations and progress already made

6.25 In addition to the changes already being made through the Green Deal
and ECO schemes, we believe that there are some additional ways in
which the concerns identified above might be tackled. In particular DECC
should ensure that there is an effective monitoring process going
forward to check quality, with clear implications for installers who fail to
maintain adequate quality.

6.26 We believe that the monitoring framework under the Green Deal and
ECO could be designed to give clearer incentives for Green Deal
Providers and installers to maintain high quality of installation. While
there are likely to be different possible ways of achieving this overall
objective, some possible approaches involve, first, adjusting the
approach to monitoring quality:

- It is important that monitoring is seen to be independent of the
  companies involved in the installations, in order to avoid any
  possibility and perception of bias and also to allow sample sizes to
  be varied so as to be representative across different sub-groups of
  installations and across Green Deal Providers.

- Ofgem (as the body responsible for monitoring ECO-funded
  installations) should liaise with the Green Deal Oversight Body (the
  body responsible for monitoring Green Deal-funded installations) over
  the monitoring methodology. This would be to ensure sampling was
  representative, for example of installations that are funded by ECO-
Consideration might be given to more focused sampling of installations. For instance, a smaller sample size than the nominal five per cent required by Ofgem under CERT might produce a statistically robust figure, in which case the savings made would allow Ofgem or the Green Deal oversight body to target a second layer of sampling on installers with a poor quality record.

• DECC should make sure that one body has clear responsibility for monitoring installations in the longer term, so as to ensure that structural issues are picked up - for example cavity wall insulation being installed in inappropriate properties, causing damp. A number of respondents to the Call for Evidence told us that damp might sometimes start appearing as much as 12-18 months after installation. We recognise that this would create additional monitoring cost, but this might be balanced by carrying out a smaller overall number of assessments (as noted above).

6.27 Second, in principle it is important to consider how the monitoring information will be used to incentivise better performance by Green Deal Providers and, if appropriate, the installers they sub-contract out to. Possible ways of achieving this might be:

• The monitoring bodies could be given the powers to publish failure rates, both in aggregate and by Green Deal Provider, together with details of those failures. This information would help customers decide who to appoint as their Green Deal Provider, thereby promoting competition between GDPs in the quality of installations, and aid customers in monitoring workmanship.

• For the ECO scheme (where obligated energy companies will contract with Green Deal Providers to discharge their obligations) the relevant regulator or oversight body could be given powers to withhold the carbon saving credited to the energy companies in proportion to the number of these providers’ measures that fail
inspection. This would provide a clear incentive for energy companies to ensure that the Green Deal Providers install insulation to a high standard under the ECO scheme.

6.28 Finally, the Government could ensure that protection on installations funded by ECO only should, where appropriate, be consistent with that on Green Deal installations (except where the protection provided under the Green Deal for financing arrangements is not relevant).
7 POST-INSTALLATION CONSUMER PROTECTION

7.1 A final set of issues raised by some respondents following on from the observations about quality made in the previous chapter, related to consumer protection and redress if problems occur.

7.2 For some products – notably cavity walls – specific guarantee schemes have been put in place to provide redress if consumers experience problems. A similar approach is currently being put in place for solid walls. The existence of these protections is welcome, given the lack of consumer awareness and difficulty in assessing quality outlined in the previous chapter. However, as outlined in this chapter, responses to the call for evidence suggested that there might be scope for improving the way these schemes work.

Concerns raised by respondents

7.3 A number of respondents expressed concern about the effectiveness of guarantees provided by the Cavity Insulation Guarantee Agency (CIGA) and the extent to which the procedures in place help ensure the quality of installations. Under the terms of these guarantees a customer who is unhappy with an installer’s response to his complaint can contact CIGA. The guarantee commits CIGA to ‘arrange for the manufacturer or system designer to investigate the matter and where required instigate any necessary remedial work free of charge’. The manufacturer or system designer is called on to investigate the matter if for any reason the installer has failed to resolve it within two months. The guarantee states that any dispute arising in relation to this guarantee shall be referred to an arbitrator determined by agreement between the parties, or in the absence of agreement, by CIGA.

7.4 The OFT has concerns that the CIGA guarantee is not working as well as it should do. The Ofgem statistics referred to in Chapter 6 concern failure rates in cavity wall installations measured against a number of particular tests. But the monitoring regime does not cover longer-term problems caused by poor quality installation and the use of inappropriate materials for the particular installation. CIGA told us that typically only 0.5 per cent of installations result in a complaint for any reasons over
their entire lifetime of 25 years, and the figure is very much lower for more serious problems. Many complaints will be resolved by the installer without needing to involve CIGA, and that some administrative or minor installation failures do not lead to problems that can be detected by households. Additionally, even if a poor installation increases the risk of a problem, it does not necessarily follow that a problem will occur. However, there is a discrepancy, and the statistics may indicate that relatively few consumers are involving CIGA when they need to.

7.5 Some respondents also raised issues about the way complaints are dealt with. We received responses which suggested that both installers and CIGA may sometimes be slow in resolving problems. The complaints that CIGA receives are often complex, and require careful investigation to determine the underlying causes. As a result CIGA acknowledges that complaints are not always resolved as quickly as it would like. Approximately half of the complaints received by CIGA in a year remain open at year end. Once an underlying cause has been discovered then the number of cases where CIGA undertakes remedial work appears to be low at around 20 per cent (with the rest being resolved either by installers or without remedial work being carried out). The terms of the guarantee exclude indirect costs, but would typically include the cost of reinstating the fabric of the building where this was the direct result of a defect.

7.6 In conclusion, the OFT has concerns that, although offering an important source of redress, the current arrangements for consumer redress for faulty installation of cavity wall insulation could be improved. The number of complaints referred to CIGA seems low when compared to Ofgem monitoring failure rates, which may mean that the faults identified have not led to a problem, or consumers with faulty cavity wall insulation are either unaware of the concern, or do not know how to put it right. And when complaints are made to CIGA we have been told that investigating and getting remedial work carried out is not always easy.

**Redress under the Green Deal and ECO**

7.7 In a number of respects the Green Deal and ECO framework should help strengthen the protections for consumers in the market. For instance:
There is greater clarity for consumers that the Green Deal Provider is responsible for the installed measures, and should deal with customer complaints in the first instance.

All installers and Green Deal Providers will need to sign up to the Consumer Code. The Consumer Code requires that they have adequate measures in place to deal with customer complaints.

7.8 Consumer complaints must be made in the first instance to the Green Deal Provider with whom it has a contact, as the Provider is charged with resolving problems. If the Green Deal Provider is not able to resolve the complaint, it will direct the customer to the Green Deal Ombudsman, which has been appointed to investigate complaints and breaches of the Consumer Code and Framework Regulations.

7.9 The Green Deal Code of Practice requires Green Deal Providers to provide consumers with a guarantee under which it will rectify problems caused either by installation or by faulty materials, including damage to the property, free of charge. It requires Green Deal Providers to take out insurance to ensure that this guarantee is valid if the Provider is no longer in place or does not honour it (which may be particularly important as, with insulation, the guarantee is for 25 years duration). Green Deal Providers are also required to ensure that:

- consumers are aware of their right to appeal any decisions made under the terms of guarantees, and
- disputes arising in connection with the guarantees can be referred to a mediator if the parties concerned cannot reach an agreement within 28 days. The mediator is to be appointed and paid for by the Green Deal Provider.

26 Appeals against a decision made about the warranty are made to the Green Deal Provider in the first instance. If the Green Deal Provider is unable or unwilling to solve the problem, the consumer can take the complaint to the Green Deal Ombudsman.
7.10 The OFT believes that consumers will be more likely to purchase insulation under the Green Deal (with or without ECO subsidy) if they know that, in the event that something goes wrong, the technical expertise is available to investigate the problem and that and they will not be left out of pocket. The CIGA scheme includes sanctions such as recovery of costs from installers and the potential for termination of membership which have been used.

7.11 Alongside CIGA’s guarantee scheme for cavity wall insulation, a corresponding body (SWIGA) is being set up to offer guarantees of solid wall insulation.

7.12 As noted previously, where installations are funded by ECO subsidy only and there is no element of Green Deal finance, the Green Deal Code of Practice does not apply, and there appears to be no consumer protection measures in place (beyond those which apply to insulation installations generally, such as the CIGA guarantee and all products and services sold to consumers). Therefore the same consumer protection issues may arise for these installations as arose previously under CERT.

**Recommendations**

7.13 We believe that consumers are more likely to decide to install insulation measures where providers are disincentivised to provide poor quality or inappropriate insulation because of a strong regulatory structure. We note that in the Green Deal framework the regulatory structure has been designed to support this.

7.14 The provisions in the Green Deal Code of Practice have the potential to ensure that the guarantees provide effective redress—but only if customers are aware of these arrangements, their concerns are dealt with effectively and in good time, and they are able to refer the dispute to a mediator, and the mediator is an appropriate independent body or person. We also think, as stated in Chapter 6, that protection on installations funded by ECO only should, where appropriate, be consistent with that on Green Deal installations (except where the
protection provided under the Green Deal for financing arrangements is not relevant).

7.15 Finally, we recommend that CIGA should put in place a governance structure which better recognises and reflects the views of consumers as well as industry stakeholders. This could include having a substantial minority of the board of directors either representing consumers or being independent of the industry and CIGA has undertaken to review this. CIGA acknowledge that complaints can often take some time to investigate and resolve, and has already implemented an enhanced complaint reporting and tracking and are instigating certain key performance indicators such as timelines for investigation and resolution of complaints. We would also encourage CIGA (and SWIGA) to publish more information on the number of complaints they receive.
8 NEXT STEPS

8.1 The OFT has identified a number of specific actions that will be taken, or have been recommended, in Chapters 4 to 7. This chapter focuses on what further work will be carried out beyond those specific steps.

8.2 The OFT does not propose to launch a market study into home insulation at this point. This is principally because:

- The introduction of the Green Deal and ECO in October this year is expected to change the market significantly, such that detailed analysis now could quickly become out of date.

- We have reached some conclusions and recommendations based on our analysis of responses to the Call for Evidence, and consider that the OFT’s resources are better used in following these up with the relevant parties rather than carrying out further more general analysis of the market.

8.3 However, we intend to keep this market under review. In particular we will be interested in:

- Whether there is any further evidence of anti-competitive behaviour of agreements in the market. If such evidence arises, we will consider what our most appropriate course of action is, in particular whether to open a Competition Act 1998 investigation.

- The extent to which the proposals we have worked on with Government and other parties have been effective in reducing some of the concerns identified in the Call for Evidence. If further work is required, we may want to re-engage.

8.4 In addition, the OFT continues to actively examine issues that may be causing consumer detriment in this sector and will look to address these, including through potential enforcement action where appropriate, working with local authority Trading Standards Services and others.
### Carbon Emissions Reduction Target (CERT)
**2008 – 2012**
CERT is a statutory carbon reduction obligation on the six major energy supply companies. Companies meet their targets by installing energy efficiency measures in domestic properties across GB. Ofgem administer the scheme and provide an annual report to the Secretary of State and quarterly updates on energy measures delivered by energy companies.

### Community Energy Saving Programme (CESP)
**2009-2012**
CESP is a statutory carbon reduction obligation on the six major energy supply companies and five independent generating companies. Companies meet their targets by installing energy efficiency measures in domestic properties in specified low income areas across GB. CESP is designed to deliver major measures, such as solid wall insulation, using a street by street partnership based approach. Ofgem administers the scheme and provide an annual report to the Secretary of State and six monthly updates on measures delivered by obligated parties.

### Energy Company Obligation (ECO)
**2012 – 2015**
ECO will follow both the existing CERT and CESP schemes. Designed to sit alongside the Green Deal initiative, ECO imposes statutory carbon reduction targets and affordable warmth targets on the six major energy supply companies. In particular ECO is designed to support measures for harder to treat properties, such as solid wall insulation, and to help those customers most in need.
# Insulation Type Materials

<table>
<thead>
<tr>
<th>Insulation Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rockwool/Stone wool</td>
<td>Rockwool is sometimes referred to as stone wool and is part of the larger group of mineral wools which includes glass wool.</td>
</tr>
<tr>
<td>Glass wool</td>
<td>Glass wool is an insulating material made from fibres of glass arranged into a texture similar to that of wool.</td>
</tr>
<tr>
<td>Expanded polystyrene (EPS)</td>
<td>Expanded Polystyrene (EPS) is a rigid and tough closed-cell foam. It is usually white and made of pre-expanded polystyrene beads.</td>
</tr>
<tr>
<td>Extruded Polystyrene (XPS)</td>
<td>Extruded Polystyrene foam consists of closed-foam cells manufactured through a plastic extrusion process.</td>
</tr>
<tr>
<td>Phenolic foam</td>
<td>Phenolic foam is a chemical mixture with high fire resistant properties and mainly used for industrial insulation purposes.</td>
</tr>
<tr>
<td>PIR/PUR</td>
<td>PIR/PUR is typically produced as a foam and is a rigid thermal insulation product.</td>
</tr>
<tr>
<td>Multifoils</td>
<td>Multifoil or multi-layer insulation products are made from separate layers of thermal materials and form a quilt like sheet which can be supplied in roll form.</td>
</tr>
</tbody>
</table>

Definitions of the various types of insulation materials as described above are for indicative purposes only and should only be interpreted in terms of their more general properties and uses.