



Department
of Energy &
Climate Change

Energy Companies Obligation (ECO) Customer Journey

Summary of findings of research with households
that received ECO-funded installations in
September 2013

December 2014

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Glossary of terms and acronyms

This report uses the following terms and acronyms:

CERO	Carbon Emission Reduction Obligation
CERT	Carbon Emissions Reduction Target
CESP	Community Energy Saving Programme
CSCO	Carbon Saving Community Obligation
CWI	Cavity wall insulation
DECC	Department of Energy and Climate Change
ECO	Energy Companies Obligation
EWI	External wall insulation
GD Advisor	Green Deal Advisor
GD Assessment	Green Deal Assessment
GD	Green Deal
HHCRO	The Home Heating Cost Reduction Obligation, or Affordable Warmth
Ofgem	The Office of Gas and Electricity Markets
SWI	Solid wall insulation

Executive summary

The Energy Companies Obligation (ECO)

The Energy Companies Obligation (ECO) was launched at the beginning of 2013, replacing two previous schemes: the Carbon Emissions Reduction Target (CERT) and the Community Energy Saving Programme (CESP). ECO places legal obligations on the larger¹ energy suppliers to promote² and deliver energy efficiency measures to domestic energy users in Great Britain. Obligated energy suppliers are required to fund the installation of energy efficiency improvements in lower income and vulnerable households. ECO is a composite of three distinct obligations:

- Affordable Warmth³, which provides heating (e.g. boilers) and insulation measures to private tenure households that receive certain means-tested benefits (particularly the elderly, individuals with a disability, and families)
- The Carbon Saving Community Obligation (CSCO), which funds insulation measures and connections to domestic district heating systems supplying areas of low income, with a specific sub-target (15 per cent of the total) for low income and vulnerable households living in rural areas
- The Carbon Emissions Reduction Obligation (CERO), which, at the time that the fieldwork was undertaken in late 2013, funded hard-to-treat homes and measures, focussing on solid wall insulation (SWI) and hard-to-treat cavity wall insulation (CWI)⁴

ECO installations are funded by energy companies. They recover the money from domestic energy bills so the cost of the programme is distributed across the population of domestic energy consumers. Energy companies may approach households directly to engage them with the ECO programme and to carry out ECO-funded installations, or they may contract this work to other organisations that will arrange and/or carry out installations (potentially involving intermediary organisations such as Housing Associations, as discussed below). Energy companies obligated under the ECO programme determine how much subsidy they provide to each beneficiary, which may depend on consumers' individual circumstances.

Study aim and research questions

The aim of this study was to carry out research into the experiences of consumers who have had energy efficiency measures installed through ECO. To meet this aim, the study was tasked with providing answers to the following research questions:

- What is the profile of ECO customers?

¹ Those with 250,000 or more domestic customers.

² Promotion is where a supplier is a cause of a measure being installed so that they can claim the associated carbon or cost saving towards their ECO obligations.

³ Also known as the Home Heating Cost Reduction Obligation (HHCRO)

⁴ Note that, after the research was carried out, the scope of CERO was extended to cover loft insulation and easy-to-treat cavity wall insulation

- How did ECO customers find out that they may be eligible for support under ECO?
- If customers started the ECO customer journey themselves, how did they find out about the programme?
- What were households' motivations for making improvements under ECO?
- Did customers pay for improvements under ECO?
- Were customers aware of where ECO funding comes from?
- What were customers' experiences of ECO installations?
- What were the perceived impacts of ECO installations?
- Is there any evidence of other changes in ECO customers' behaviour?

Study methodology

This study involved a mixture of quantitative and qualitative research with households that had received ECO-funded installations in September 2013⁵. Between November and December 2013 the following primary research was carried out:

- A quantitative survey of a random sample of individuals from households that had had ECO measures installed. The survey was carried out using a hybrid online survey/ face-to-face survey approach⁶, whereby respondents were first invited to complete an online survey, and non-responders to this online survey were contacted with a view to securing an appointment to complete the survey face-to-face. A total of 468 households were surveyed, boosted by an additional 103 surveys with households that had had ECO-funded SWI installed (in order to provide a sufficient base for analysis of SWI installations). Note that the boost of 103 SWI surveys was not added to the main sample, but remains separate throughout this report.
- In-depth semi-structured qualitative interviews with a purposively-selected sample of 28 individuals from households that had had ECO measures installed. The sample consisted of individuals and households with a range of characteristics, including a mixture of types of measure (new boiler, loft insulation, CWI and SWI).

Research was conducted with households that had received ECO-funded installations in September 2013. In September 2013, statistics on the ECO programme that were published by DECC⁷ indicate that a total of 58,966 measures were installed under ECO, of which half (49%) were installed under Affordable Warmth, 36% under CERO, and 15% under CSCO. The relative balance between obligations changed somewhat subsequent to completion of research: as at September 2014⁸ (over the lifetime of the ECO programme), 39% of installations had taken place under Affordable Warmth, 39% under CERO, and 21% under CSCO. The quantitative survey thus took place at a point in time when Affordable Warmth customers made up a greater proportion of ECO households than is now the case. Affordable Warmth households have a

⁵ More information on the study's methodology can be found in the Technical Report available here:

<https://www.gov.uk/government/publications/energy-companies-obligation-eco-customer-journey-research>

⁶ This replicated the methodology used as part of surveys of households that had received Green Deal assessments, and was adopted because: there was a danger that a purely online/ postal survey would have resulted in a very low response rate and associated risk of non-response bias, and because the Ofgem database that formed the basis for the sample frame did not include telephone numbers that would enable a telephone survey to be undertaken

⁷ DECC (20 November 2014) Domestic Green Deal and Energy Company Obligation in Great Britain, Monthly report

⁸ *Ibid.*

specific profile, reflecting the eligibility criteria associated with the obligation (e.g. receipt of benefits), and the nature of Affordable Warmth installations (statistics on the ECO programme that were published by DECC indicated that boilers made up 70% of all Affordable Warmth installations as at September 2014, compared to 28% of all ECO installations). Readers should thus note that the findings of this study in respect of the ECO population as a whole are 'skewed' towards Affordable Warmth installations to a greater extent than is currently the case, and are thus not entirely comparable with the lifetime of the programme.

Further detail on the study methodology is contained in Chapter 1 of this report and in a Technical Report that has been published separately.

Key findings

The following sections present the key findings of the primary research (quantitative and qualitative) with ECO households. Note that whenever findings are presented for SWI households, these results were derived from the 'boost' survey of SWI households, rather than the 'main' survey of all ECO households.

Profile of households that had ECO measures installed in September 2013⁹

Two thirds (66%) of ECO households reported an annual household income of less than £16,000, highlighting the extent to which ECO was targeted at those on low incomes. Low income households were especially well represented under Affordable Warmth, where 77% of households reported an annual household income below £16,000. CERO households, in contrast, were slightly less likely to be low income, reflecting the fact that the obligation delivered targets through certain measures (SWI and hard-to-treat CWI) rather than specific types of household.

Most ECO households (76%) were owner occupiers and the remaining households were private renters or social tenants (17% and 7%, respectively). That said, a quarter of households that received installations under Affordable Warmth (25%) lived in private rented accommodation.

As part of an earlier study¹⁰, GfK NOP, working for DECC, developed a set of market 'segments' to describe the extent to which the British population was receptive to the idea of energy efficiency installations. Comparison of ECO households that received ECO-funded installations in September 2013 (i.e. the subjects for this study) with these segments suggests that ECO households were more likely than the British household population as a whole to be motivated by a need to save money through energy efficiency installations (so-called 'money savers'). They were also more likely to be interested in energy efficiency but deterred by a distrust of installers or a lack of information (so-called 'convertibles').

Households' initial engagement with ECO

Household engagement with ECO was typically a reactive process, whereby households were approached and informed that they could have an energy efficiency measure(s) installed for

⁹ As noted, research was conducted with households that received ECO-funded installations in September 2013, when Affordable Warmth constituted a higher proportion of ECO installations than was subsequently the case. Consequently, readers should note that the ECO-wide data contain a larger share of Affordable Warmth households (which have a distinct profile) than would be the case if the research had covered the whole of the ECO programme period.

¹⁰ GfK NOP and Kantar Media Research for DECC (November 2012) Green Deal Segmentation: Report of a Segmentation of Owner Occupiers and Private Rented Tenants in Great Britain; available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49750/Green_Deal_segmentation_-_research_report.pdf

free or at a reduced rate. Around a third of all households (32%) had been introduced to ECO via a door-to-door sale (someone had called at their property). Other approaches that households had experienced included: telephone calls (5% of households), or being approached by a salesperson in the street or in a shop (3%). A further 11% of households were introduced to ECO via a leaflet or a letter in the post. Some 13% of households reported that they had been informed about ECO by their landlord, local authority or housing association.

Of the households that had been approached directly¹¹, a third (36%) reported that they had been approached by multiple organisations. Half (56%) of this sub-group of households¹² saw the 'choice' of ECO organisations as a positive, but a quarter (24%) felt that an approach by multiple organisations had pressurised them into having work done. Qualitative interviewees reported that they had received mixed and conflicting messages when approached by multiple organisations, for example in relation to the suitability of their property for the installation of specific types of measure.

Motivations for proceeding with an installation

There were a wide range of reasons why households decided to proceed with their ECO installation after having been approached. The perceived benefits – money savings (47% of households), a warmer home (45% of households) – were important motivations for many, as was the offer of home improvements for free or at a reduced price (44% of households). Some households reported that they had proceeded because measures were recommended by their landlord/ housing association (5%) or by friends/ family (2%); 9% of households reported that they had not had a choice – their landlord/ housing association had made the decision on their behalf. Qualitative interviews found that some households had valued having measures recommended to them, since this added legitimacy. For example, some interviewees noted that a recommendation from a landlord/ housing association, or from friends and neighbours, was a key factor that had persuaded them to proceed with an ECO installation.

Before they first engaged with ECO, most households (59%) indicated that they had never previously considered installing the measure that they went on to receive (e.g. because they had never heard of it, did not think it could be done to their property, or because they were renting and assumed it was not their decision to make). Some 12% of households reported that they either had firm plans to install the measure or were in the process of doing so when they first engaged with ECO (amongst households that received SWI the proportion was lower at 5%).

Pre-installation assessments or visits

Most households (86%) reported that they had received an assessment or visit prior to their ECO-funded installation. Ofgem guidance stipulates that measures funded under CERO and CSCO require a recommendation based on a GD Assessment or Chartered Surveyor's report, but this is not required under Affordable Warmth. That said, households with measures installed under Affordable Warmth typically reported that they had received an assessment/ visit (91% of Affordable Warmth households).

Assessments often focussed on activities relevant to the measure that was to be installed (e.g. an inspection of the walls in advance of the installation of CWI). There was typically very little discussion of other energy efficiency measures (including those that might be covered by ECO) or energy efficiency more generally (just 18% of households that had had an assessment or

¹¹ A 'direct approach' was defined as one of the following: door-to-door sale; telephone call(s); or approached in the street or in a store (n=179, or 38% of the total sample). Note that the survey did not ask respondents to identify the organisation that had carried out the direct approach

¹² Note that this sub-group had a very low base (n=56), so the results should be treated with caution

visit reported that this had involved discussion of how they used energy, and 9% had involved the 'assessor' looking at their energy bills).

Assessments/ visits were typically in the 20-60 minute range (60% of households that had an assessment/ visit), though a significant minority lasted less than 20 minutes (18% of households that had an assessment/ visit). Perhaps not surprisingly, visits of under 20 minutes duration were less likely to involve discussion of energy efficiency or household use of appliances, and were instead focussed on activities relevant to the measure being installed (e.g. checking a loft in advance of a loft insulation installation).

Most (67%) households that reported they had had a pre-installation assessment/ visit reported that they had subsequently received written information. This information consisted of 'transactional' type details (e.g. appointment times, quotations), and/or information about energy efficiency improvements. However, a third (32%) of households that had received written information reported that they had not looked at it or used it (at the time of the research – i.e. between two and four months after their assessment/visit).

Households generally reported that they were clear about key features of their ECO-funded installations following an assessment/ visit. For example, 81% of households that had an assessment/ visit reported that they were clear about what the installation would entail, and 84% were clear about the nature of the improvements that were recommended. Reported clarity was higher where written information was provided to households as part of an assessment/ visit. There were no statistically significant differences in households' reported clarity of understanding depending on whether the assessment/ visit had been a GD assessment or a Chartered Surveyor's visit¹³.

Post-assessment actions

Most households (83%) reported that their ECO-funded installations had been carried out by the same organisation that had contacted them in the first place (or that this organisation had arranged the installation on their behalf). Some households (6%) reported that their installation had been arranged by their landlord or similar (this was particularly true of households that had had CWI or SWI installed), and thus they had not had an input into the selection of installer.

Focussing on households that indicated that they had decided which installer to use to carry out their installation¹⁴ (i.e. excluding households where the installation was arranged by their landlord/local authority/housing association), just under half of this sub-group of households (45%) reported that they had selected their installer on the basis that this was the only organisation that they had spoken to. A third of households (32%) had decided on their installer on the basis that they were offering to carry out the installation for free. The convenience offered by an installer (e.g. availability of appointment times) and recommendations from friends and family were also factors that survey respondents reported having considered when deciding whether to proceed with their installer.

Satisfaction with the process of arranging an ECO installation was very high, and between 78% and 81% of all households were satisfied with the information they were provided with, the range of appointment times offered, and how long they had to wait for an appointment.

¹³ Data on whether households had received a GD assessment, Chartered Surveyor's visit or neither of these (note that this category did not distinguish between did not receive an assessment and received an assessment that was neither a GD assessment nor a Chartered Surveyor's visit) was obtained from the sample information, and was used as part of the cross-break analysis in order to explore whether the type of visit affected households' ECO customer journey

¹⁴ n = 440 (equal to 94% of the total sample)

Households' installation experiences

Households reported that the vast majority of ECO-funded measures (97%) were installed without any requirement that they personally contribute towards the cost of installation. Note that this result concerns measures that were installed in September 2013. A customer contribution was more likely where SWI had been installed (15% of SWI households reported that they had made a financial contribution, compared to 5% of households that had had a boiler installation).

Households' reported satisfaction with their ECO installations was high, with 86% of households indicating that they were satisfied with the quality of the installers' work, and 85% that they were happy with the quality of the installation. Some customers had experienced problems with the measure that had been installed (in some cases it had not been completed), or had post-installation complaints (e.g. a mess left behind), but these were relatively uncommon (just 16% of households reported that they had experienced a problem with their ECO-funded installation). This was more of a problem where SWI was installed, with 31% of SWI households indicating that they were dissatisfied with how clean/ tidy their property had been left after the installation (compared to 9% of all households). This might be a result of the more 'intrusive' nature of SWI installations compared to other types of measure and a lack of understanding amongst customers of the installation process (i.e. what they should expect).

Awareness amongst consumers that measures were being installed under the 'brand' of the ECO programme was low, with just 12% of households able to explicitly identify ECO. There is no requirement that the organisations that approach households about ECO ensure that households are aware of the ECO programme. For the most part, households either did not know who had paid for their installation (29% of households), or attributed it to 'the government' (40% of households).

Households' post-installation experiences

The amount and type of post-installation follow-up that households had experienced varied. Follow-ups could involve checking that households were satisfied with their installation, and could also involve the provision of advice as to how best to use installations (e.g. the optimal use of heating controls). Around half of households had had some kind of follow-up (45%), and around half had not (47%)¹⁵. A follow-up typically involved 'remote' contact by phone (17% of all households) or by a letter (12% of all households), or a post-installation visit/ inspection (21% of all households). A post-installation visit/ inspection was more common where SWI had been installed, with 46% of SWI households reporting a visit/ inspection, compared to 21% of all households.

Most (72%) households that had had energy efficiency measures installed under ECO reported that they had already noticed the benefit(s), even though the research was carried out prior to the onset of the main winter heating season. Households reported that their home was warmer (69% of households) and, to a lesser extent, that their energy bills were lower (18% of households, though note that this was not verified). There was evidence that the type of measure installed affected reported benefits, with households that had had boilers installed more likely to have noticed the benefit than households with CWI installed (where households often believed that it was too early to tell).

The majority (84%) of households had recommended or intended to recommend both their specific measure and energy efficiency measures more generally to friends and family. Even where households had not yet experienced any benefit to their installation, the majority of them still indicated that they would recommend the measure to their friends and family.

¹⁵ The remaining households responded 'don't know' when asked if they had had follow-up

1. Background and methodology

The Energy Companies Obligation (ECO)

- 1.1. The Energy Companies Obligation (ECO) was launched at the beginning of 2013, replacing two previous schemes: the Carbon Emissions Reduction Target (CERT) and the Community Energy Saving Programme (CESP). ECO placed legal obligations on the larger¹⁶ energy suppliers to promote¹⁷ and deliver energy efficiency measures to domestic energy users in Great Britain. Obligated energy suppliers are required to fund the installation of energy efficiency improvements in lower income and vulnerable households.
- 1.2. ECO operates alongside the Green Deal (GD) and is intended to provide additional support for packages of energy efficiency measures in the domestic sector with a particular focus on vulnerable consumer groups and hard-to-treat homes. The Government anticipated that ECO would assist in the reduction of carbon emissions, maintenance of security of energy supply, and reduction in the drivers of fuel poverty¹⁸.
- 1.3. ECO is a composite of three distinct obligations:
 - **Affordable Warmth, also known as the Home Heating Cost Reduction Obligation (HHCRO):** Affordable Warmth provides heating and insulation measures to consumers living in private tenure properties (i.e. owner occupiers and private tenants) that receive specific means-tested benefits. This obligation supports low-income consumers that are vulnerable to the impact of living in cold homes, including the elderly, disabled and families. Under Affordable Warmth, suppliers must deliver measures that result in cost savings and improve the ability of a householder to affordably heat their home.
 - **The Carbon Saving Community Obligation (CSCO):** This provides insulation measures to households in specified geographical areas of low income. It requires that 15% of each supplier's obligation is used to upgrade more hard-to-reach low-income households in rural areas in settlements with a population size under 10,000. A list of eligible low-income areas – defined using the bottom 15% of Lower Super Output Areas (LSOA) from the Indices of Multiple Deprivation (IMD) in England, Wales and Scotland – and a definition of rural areas for England, Scotland and Wales (as referred to in the ECO Order legislation) has been published.¹⁹

¹⁶ Those with 250,000 or more domestic customers.

¹⁷ Promotion is where a supplier is a cause of a measure being installed so that they can claim the associated carbon or cost saving against towards their ECO obligations.

¹⁸ *The Green Deal and Energy Company Obligation Consultation*, Reference number 11D/886. See: http://www.decc.gov.uk/en/content/cms/consultations/green_deal/green_deal.aspx

¹⁹ *Energy Company Obligation Carbon Saving Community Obligation: rural and low-income areas*, DECC, June 2012. Available at <https://www.gov.uk/government/publications/carbon-saving-community-obligation-rural-and-low-income-areas> (accessed 14 March 2014)

- **The Carbon Emissions Reduction Obligation (CERO):** at the time that the fieldwork for this study was undertaken in late 2013, CERO funded the installation of solid wall insulation (SWI) and hard-to-treat CWI alongside packages of energy saving measures.

- 1.4. In the Chancellor’s Autumn 2013 Statement, a number of changes were proposed to ECO (and the Green Deal). A consultation on the proposed changes was launched in March 2014²⁰, and the government’s response was published in July 2014²¹. Amongst other changes, the scope of CERO was extended to cover loft insulation and easy-to-treat cavity wall insulation. Note, however, that the research reported here describes ECO as of December 2013, when the fieldwork was carried out (as described below).
- 1.5. ECO installations are funded by large energy companies. They recover the money from domestic energy bills so the cost of the programme is distributed across the population of domestic energy consumers. Energy companies obligated under the ECO programme determine how much subsidy they provide to each beneficiary. This may depend on consumers’ individual circumstances and the amount of any GD finance being used. Energy companies may approach households directly to engage them with the ECO programme and to carry out ECO-funded installations, or they may contract this work to other organisations that will arrange and/or carry out installations (potentially involving intermediary organisations such as Housing Associations, as discussed in Chapter 3).

Research aims and questions

- 1.6. In September 2013, ICF International and GfK NOP were commissioned by DECC to carry out research into the ECO customer journey. This study forms part of the evaluation of the GD and ECO programme that is being led by ICF International.
- 1.7. The aim of this study was to carry out research into the experiences of consumers who have had energy efficiency measures installed through ECO. It was tasked with evaluating consumers’ experiences at each of the key stages of the ECO customer journey (summarised in Figure 1.1).

Figure 1.1: Overview of the ECO customer journey



²⁰ <https://www.gov.uk/government/consultations/the-future-of-the-energy-company-obligation>

²¹

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/342178/The_Future_of_the_Energy_Company_Obligation_Government_Response.pdf

Research questions

- 1.8. The study was tasked with providing answers to the following research questions:
- What is the profile of ECO customers?
 - How did ECO customers find out that they may be eligible for support under ECO?
 - What were households' motivations for making improvements under ECO?
 - Did customers pay for improvements under ECO?
 - Were customers aware of where ECO funding comes from?
 - What were customers' experiences of ECO installations?
 - What were the perceived impacts of ECO installations?
 - Is there any evidence of other changes in ECO customers' behaviour?

Study methodology

- 1.9. This study involved a mixture of quantitative and qualitative research with households that had had ECO-funded measures installed in September 2013²². The primary methodology employed for this study was quantitative research, which was chosen because the main subject matter – the 'customer journey' under ECO – required a breadth of information in order to best capture the range of customer experiences. This report also draws on a smaller piece of qualitative research designed to explore ECO customer journeys in more detail, for example reasons for levels of satisfaction or dissatisfaction across different elements of the sales and installation service under ECO.
- 1.10. The primary research was conducted by GfK NOP. Both the qualitative and quantitative research was based upon data on the number of measures installed under ECO and registered in September 2013 (and validated) by Ofgem. These data provided the population from which a sample of households was drawn for the quantitative survey and the qualitative research²³.

Quantitative research

Sample design

- 1.11. The quantitative sample had two elements:
- A 'main' representative sample of households which had ECO-funded installations in September 2013²⁴;
 - A survey 'booster' sample of households that had received SWI in September 2013. Installation of SWI is important from a policy perspective as the measure is important

²² Data provided by DECC indicated that a total of 49,925 households had ECO-funded measures installed in September 2013. Monthly Green Deal and ECO statistics indicate that a total of 58,966 ECO-funded measures were installed in September 2013, equivalent to an average of 1.2 measures per household (see https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/356910/Monthly_Statistical_Release_Green_Deal_and_ECO_in_GB_23_Sept_Final.pdf)

²³ It is important to note that information about measures installed under ECO is at a lag of a one month due to the time taken for information to be reported and verified. The survey of ECO beneficiaries was undertaken during the period 30 November to 24 December 2013 following the completion of validation checks by Ofgem.

²⁴ It was decided that the survey would look at the ECO customer journey as a single experience, rather than splitting it into three surveys exploring the three ECO obligations (Affordable Warmth, CERO and CSCO) separately. The goal of the study was to draw conclusions about the ECO customer journey rather than journeys under separate obligations, and for practical reasons relating to the need to generate clusters of households for survey it was not feasible to treat each obligation in isolation

to the achievement of ECO targets, but is relatively expensive and there have been relatively few installations of this measure across the programme.

- 1.12. To make the survey process more practical and efficient, clusters of addresses were created²⁵. Viable clusters were defined as having ten or more addresses within a single postcode sector. In September 2013 this comprised 32,946 addresses from the universe of 49,925 addresses (equating to 66% of the universe). All potential addresses were then stratified by the following variables (in the order shown): region; measure installed²⁶; obligation (Affordable Warmth, CSCO, CERO); urbanity; tenure (owner occupier, social tenant or private tenant); property type (house/bungalow or flat/other); ECO entry route (GD assessment, Chartered Surveyor visit or other).
- 1.13. A total of 900 addresses were selected. An additional sample of households who had SWI installed was also created to enable analysis of SWI households. The sample for the SWI boost was drawn in the same way as the main sample, and addresses from the main sample were removed from the sampling frame for the SWI boost.

Fieldwork

- 1.14. The survey was carried out using a hybrid online survey/ face-to-face survey approach²⁷, whereby respondents were first invited to complete an online survey, and non-responders to this online survey were contacted with a view to securing an appointment to complete the survey face-to-face. The first contact with sampled households was via an advance letter which was used to introduce the survey and to invite respondents to complete the survey online. Following a short 'online only' fieldwork period of four days, GfK NOP's face-to-face researchers began calling at sampled addresses that had not completed the survey online. To reduce the impact of mode effects, the questionnaires used were exactly the same, with face-to-face surveys being self-completed by respondents rather than being administered by GfK NOP researchers.
- 1.15. Fieldwork on both the main and SWI boost samples was conducted at the same time, between 30 November and 24 December 2013. On average, the questionnaire took 31 minutes to complete. Figure 1.2 summarises the response rates achieved as part of the household survey.

²⁵ This approach replicated the household sampling method used as part of parallel Green Deal Customer Journey research – see GfK NOP for DECC (September 2014) Green Deal Customer Journey survey: Technical report, Quantitative survey wave 3

²⁶ A large number of measures were shown in the Ofgem database, but for the purposes of stratification and weighting, the following categories were used on the basis of being the most common measures installed: new boiler, cavity wall insulation, loft insulation, solid wall insulation and other measure. Where households had multiple measures installed, a 'main measure' was selected to allow measure type to be used as a stratification and weighting variable. The prioritisation was in the following order: solid wall insulation (SWI); cavity wall insulation (CWI); boiler; loft insulation; other. The effect of this prioritisation sequence was to slightly increase the number of SWI households selected – see the Technical Report published separately to this analytical report for details

²⁷ This replicated the methodology used as part of surveys of households that had received Green Deal assessments, and was adopted because: a purely online/ postal survey would probably have a very low response rate and associated risk of non-response bias, and because the Ofgem database that formed the basis for the sample frame did not include telephone numbers that would enable a telephone survey to be undertaken

Figure 1.2: Completed surveys and response rates for the main and SWI boost surveys

	Main survey	SWI boost
Completed surveys...	468	103
...of which online	58	14
...of which face-to-face	410	89
Eligible sample#	872	181
Response rate based on eligible sample	54%	57%

After inaccurate and ineligible addresses were removed from the sample

Data analysis and weighting

- 1.16. The data processing resulted in the production of two datasets:
- A 'main' dataset: a representative sample of households which had an ECO installation in September 2013;
 - A sample of households which had had SWI installed in the same time period – this included 63 households which had SWI installed taken from the 'main sample', which were combined with an additional 103 surveys from the SWI 'booster' survey to provide a SWI sample of 166 surveys.
- 1.17. Crossbreaks were added to data tables to allow for sub-group analysis by a number of variables including standard respondent demographics (for example age, gender, ethnicity), housing characteristics (for example house/flat, tenure, Energy Performance Certificate rating), route to entry to ECO (GD Assessment, Chartered Surveyor Report, Other), measure installed and matching ECO obligation (Affordable Warmth, CSCO, CERO) and also households' GD segments²⁸.
- 1.18. The data were weighted to the profile of all households that had an ECO installation in September 2013 to correct for any minor differences between the interviewed sample and the sample universe. The effective sample size²⁹ associated with this weighting was 80.7% of the total sample.
- 1.19. The SWI 'booster' surveys were not added in with the 'main' sample, as to do so would have a significant negative impact on the effective sample size for the survey: reducing it to 67.8%. The effective sample size describes the effect of the weighting on the accuracy of survey estimates. Instead two volumes of data tables were produced: a 'main' set, and a volume which compared the SWI sample with the main sample to easily enable comparisons between the two.

²⁸ GfK NOP and Kantar Media Research for DECC (November 2012) Green Deal Segmentation: Report of a Segmentation of Owner Occupiers and Private Rented Tenants in Great Britain; available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49750/Green_Deal_segmentation_-_research_report.pdf

²⁹ The effective sample size describes the effect of the weighting on the accuracy of survey estimates. It is dependent upon the size of weights applied to respondents: the more the weights deviate from 1, the smaller the effective sample size.

Reporting conventions

- 1.20. The results presented in this report have been derived from the survey of households that received an ECO-funded installation in September 2013. As discussed above, the sample for this survey was designed to be representative of the population from which it was drawn, but even with post-survey weighting, did not exactly match the profile of the population (see the Technical Report published separately for more details on the characteristics of the sample). Chapter 2 presents a summary of the profile of ECO households based on survey returns, and readers should thus note that some of the headline statistics (e.g. the distribution of ECO measure types – boilers etc. – across households) may not exactly match the statistics presented in DECC's ECO programme publications.
- 1.21. Throughout this report, whenever the word significant is used it is done to express a statistically significant difference. This means that any differences between results are likely to be down to an actual change, rather than errors related to sampling or methodology. A number of charts show the results of the main sample compared with the SWI sample, where significant (and notable) differences were observed. All differences commented upon are statistically significant at the 95% confidence level³⁰. In line with other reports published as part of the evaluation of the Green Deal and ECO programme, results have been omitted where the base size for responses to a question was below 50³¹. All charts and tables contain weighted data; the unweighted base size is always presented below the chart or table, and/or in a footnote within the text.
- 1.22. In several places, this report draws attention to statistically significant differences in responses between households with different types of measure installed under ECO. Readers should note that this does not imply causality, and that the measure installed under ECO is closely associated with ECO obligation³², which in some cases could equally be used to interpret the data³³.

Limitations of the research

- 1.23. Research was conducted with households that had received ECO-funded installations in September 2013. In September 2013, statistics on the ECO programme that were published by DECC³⁴ indicate that a total of 58,966 measures were installed under ECO, of which half (49%) were installed under Affordable Warmth, 36% under CERO, and 15% under CSCO. The relative balance between obligations changed somewhat subsequent to completion of research: as at September 2014³⁵ (over the lifetime of the ECO programme), 39% of installations had taken place under Affordable Warmth, 39% under CERO, and 21% under CSCO. The quantitative survey thus took place at a point

³⁰ Two-tailed Z-tests.

³¹ Following DWP (October 2013) DWP research reports style guide, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/263009/dwp-research-style-guide-oct-2013.pdf

³² A Cramér's V test was carried out to measure the degree of association between the two nominal variables (i.e. ECO obligation and type of ECO measure installed). A Cramér's V value can vary from 0 (corresponding to no association between the variables) to 1 (complete association). The value of Cramér's V in this instance was 0.8, which indicates a strong degree of association between these two variables.

³³ In some cases there were not statistically significant differences between obligations, but there were between measures (reflecting the fact that the association between measure and obligation was not perfect).

³⁴ DECC (23 September 2014) Domestic Green Deal and Energy Company Obligation in Great Britain, Monthly report

³⁵ *Ibid.*

in time when Affordable Warmth customers made up a greater proportion of ECO households than is now the case. Affordable Warmth households have a specific profile, reflecting the eligibility criteria associated with the obligation (e.g. receipt of benefits), and the nature of Affordable Warmth installations (statistics on the ECO programme that were published by DECC indicated that boilers made up 70% of all Affordable Warmth installations as at September 2014, compared to 28% of all ECO installations). Readers should thus note that the findings of this study in respect of the ECO population as a whole are 'skewed' towards Affordable Warmth installations to a greater extent than is currently the case, and are thus not entirely comparable with lifetime of the programme.

- 1.24. Readers should also note that the sample included just 77 households that had had measures installed under the CSCO obligation (since this reflected the CSCO share of all installations carried out in September 2013). Results for CSCO households should thus be treated with some caution given the low base size and relatively wide confidence intervals (see below).

Confidence intervals

- 1.25. A confidence interval is a measure of the range within which it is probable that a population value lies. The wider the confidence interval, the more variation there is in an estimate of the population value. It is typical to calculate confidence intervals using a 95% confidence level. This means that we are 95% certain that the population value lies within the confidence interval (i.e. that if we drew 100 samples from the population and asked the same question, in 95 of these 100 samples, their response to the question would lie within the range of the confidence interval).
- 1.26. Figure 1.3 shows the confidence intervals for a selection of sample sizes for a range of survey estimates (e.g. percentages of survey respondents). For example, if 468 ECO households answered a yes/no question and 50% said 'yes', we can be 95% certain that between 45.5% and 55.5% of all ECO households in the universe would have answered 'yes'. As this table demonstrates, confidence intervals narrow (meaning greater precision about the true population value) when the sample size increases and/or where responses are more 'polarised' (i.e. where a high/low proportion of survey respondents provide a particular response).

Figure 1.3: Confidence intervals for the quantitative survey (expressed as +/- %) for a selection of samples and survey responses (percentages)

Type of actor	Sample size	Confidence intervals (+/-%) for selected survey responses		
		10% / 90%	30% / 70%	50% / 50%
All ECO households	468	2.7	4.2	4.5
SWI households	166	4.6	7.0	7.6
Affordable Warmth households	220	4.0	6.1	6.6
CSCO households	77	6.7	10.2	11.2
CERO households	171	4.5	6.9	7.5

- 1.27. Note that in several places within this report, sub-group analysis has been undertaken. Some of these sub-groups are shown in Figure 1.3 (e.g. differentiated between the three obligations that make up ECO). In these cases the base sizes are lower than the total sample size of 468 households, and the confidence intervals are wider. This means that there is slightly less precision about the true population value. Any small differences in the data where base sizes are low should thus be treated with caution, though throughout this report only statistically significant differences have been noted in the text.

Qualitative research

Sample design and recruitment

- 1.28. Qualitative interviews were undertaken with a purposively-sampled selection of individuals from households that had had ECO measures installed during September 2013. The sample was designed to ensure coverage of a range of individual/ household characteristics (e.g. a mix of ECO obligations, interviewee ages), and so minimum interview numbers were allocated to selected interviewee characteristics (see Figure 1.4 for details).
- 1.29. In total, two qualitative interview samples were drawn, in order to ensure a range of customer experiences:
- Contacts who had been identified during previous GD Assessments research (in order to ensure that the qualitative sample included households that had had a GD Assessment, and had decided to have an ECO installation following their assessment);
 - A sample of households was obtained from a database of customers who had an installation recorded with Ofgem in September 2013.
- 1.30. In total, 28 interviews were completed³⁶. As shown in Figure 1.4, it was not always possible to achieve the minimum target number of interviews across the selected interviewee characteristics. This was because it was necessary to carry out interviews in geographical clusters³⁷, and for interviewee characteristics that were relatively rare (e.g. households that held negative views of their ECO experiences, households with SWI installed), it was not possible to identify and secure interviews with households during the fieldwork period in the selected clusters.

³⁶ Consisting of 20 interviews from the Ofgem household sample and 8 interviews from the sample of contacts from previous research.

³⁷ Interviews were carried out in London (11 interviews), Leigh (1 interview), Leeds (3 interviews), Birmingham (8 interviews) and Manchester (5 interviews)

Figure 1.4: Characteristics of the sample of qualitative interviews

Sample characteristics	Sample categories	Minimum intended sample	Achieved sample (no. interviewed)
Interviewee age	18-44	8	6
	45+	8	22
ECO obligation under which measure was installed [^]	Affordable Warmth	6	8
	CERO	6	5
	CSCO	6	7
Individuals' tenure type	Owner occupier	3	23
	Private renter	3	2
	Council renter	3	3
Measure installed under ECO	New boiler	To achieve a spread across the measures	10
	Loft insulation		13
	Cavity wall insulation		4
	Solid wall insulation		1
House type	Flat	3	3
	Detached house	3	2
	Semi-detached house	3	11
	Terraced house	3	12
Satisfaction with ECO experience [#]	Very positive	To achieve a spread across positive or neutral experiences	13
	Quite positive		12
	Neither positive/negative		0
	Quite negative	3	1
	Very negative	3	2
Interviewee gender	Male	8	11
	Female	8	17
Interviewee ethnicity	White or white British	To achieve a spread across ethnicities	21
	Black or black British		1
	Asian or Asian British		6
Children under 16 years in household?	Yes	8	10
	No	8	18

Note: this was determined as part of a screener during interview set-up; [^] for the 8 households sampled from previous assessments research, the obligation was not known

Fieldwork and data analysis

- 1.31. A letter was sent to all potential participants, providing them with an opportunity to opt out of the research (see the technical report published separately). Although the Ofgem database did not contain telephone numbers, these were obtained via a process of number-matching whereby public sources were used to obtain telephone numbers based on name and address data. Potential participants were then contacted by telephone and a set of screening questions was asked to establish the participant's suitability to take part according to the agreed sample specification. An appointment was made, confirmed by letter (with a further option to opt out) and the interviewer visited them at home. Participants were reminded of the appointment 24 hours in advance. A £40 incentive was paid to participants. Each interview lasted for around an hour in length.
- 1.32. Qualitative interviews were carried out by staff from GfK NOP between 4 and 28 November 2013. Interviews were recorded. A framework approach was applied in order to undertake thematic analysis of qualitative data, based primarily on between-case analysis (i.e. examination of patterns of responses across questions, and whether this varied depending on the characteristics of interviewees, such as the type of measure installed and their backgrounds). Further details are included in the technical report published separately.

Limitations of the qualitative research

- 1.33. As Figure 1.4 indicates, within the fieldwork period it was only possible to carry out a single interview with a household that had had SWI installed. Due to the small sample size, it was thus not possible to undertake detailed thematic analysis of households' experiences of SWI installation (though note that the results of these interviews were still included within the wider analysis of qualitative data).

2. Profile of ECO households

This chapter presents a profile of the households that had measures installed under ECO, including analysis of their economic position and their housing and tenure type

Note on presentation and interpretation of findings

- 2.1. As discussed in Chapter 1, research was conducted with households that received ECO-funded installations in September 2013, when Affordable Warmth constituted a higher proportion of ECO installations than was subsequently the case (to recap, statistics published by DECC on the ECO programme indicate that Affordable Warmth accounted for 49% of all installations in September 2013, compared to 39% of all installations that had taken place under ECO up until September 2014)³⁸. Throughout this chapter, ECO households are disaggregated between the three obligations (since the profile of households, and which obligation they were supported under, is affected by ECO eligibility criteria), and also combined to give ECO-wide data. Readers should note that the ECO-wide data contain a larger share of Affordable Warmth households (which have a distinct profile) than would be the case if the research had covered the whole of the ECO programme period.
- 2.2. As noted in Chapter 1, readers should also note that the data presented in this chapter were derived from analysis of the results of the survey of ECO households. The sample for this survey was designed to be representative of the population from which it was drawn, but even with post-survey weighting, did not exactly match the profile of the population (see the Technical Report published separately for more details on the characteristics of the sample). Some of the headline statistics (e.g. Figure 2.1 which shows the distribution of ECO measure types – boilers, CWI etc. – across households) may not exactly match the statistics presented in DECC's ECO programme publications.

Key messages

- Two thirds (66%) of ECO households reported an annual household income of less than £16,000, highlighting the extent to which ECO was targeted at those on low incomes. Low income households were especially well represented under Affordable Warmth, where 77% of households reported an annual household income below £16,000. CERO households, in contrast, were slightly less likely to be low income, reflecting the fact that the obligation delivered targets through certain measures (SWI and hard-to-treat CWI) rather than specific types of household.
- Most ECO households (76%) were owner occupiers and the remaining households were private renters or social tenants (17% and 7%, respectively). That said, a quarter of households that received installations under Affordable Warmth (25%) lived in private rented accommodation.

³⁸ DECC (20 November 2014) Domestic Green Deal and Energy Company Obligation in Great Britain, Monthly report

- As part of an earlier study, GfK NOP, working for DECC, developed a set of market 'segments' to describe the extent to which the British population was receptive to the idea of energy efficiency installations. Comparison of ECO households that received ECO-funded installations in September 2013 (i.e. the subjects for this study) with these segments suggests that ECO households were more likely than the British household population as a whole to be motivated by a need to save money through energy efficiency installations (so-called 'money savers'). They were also more likely to be interested in energy efficiency but deterred by a distrust of installers or a lack of information (so-called 'convertibles').

Summary of measures installed under ECO

- 2.3. Figure 2.1 summarises the measures that were installed within ECO households in September 2013:
- Boilers were the most commonly installed measure, installed within 44% of ECO households. Some 90% of households supported under Affordable Warmth had boilers installed, reflecting the focus of the obligation.
 - CWI was the next most common measure installed under ECO, and was installed in just over a third of all ECO households (36%). CWI made up 80% of the measures installed within CERO households, reflecting the focus on hard-to-treat cavity walls under CERO (at the time of the fieldwork).
 - Loft insulation was installed in 20% of ECO households. Three quarters (75%) of CSCO households had loft insulation installed.
 - SWI made up 19% of the installations carried out within CERO households (reflecting the target of the obligation at the time), and SWI constituted 7% of installations within all ECO households.

Figure 2.1: Profile of ECO measures installed, by obligation (data relate to ECO measures installed in September 2013)

Measure(s) installed in houses	% of ECO households			
	All households	Affordable Warmth households	CSCO households	CERO households
Boiler	44%	90%	0%	0%
CWI	36%	4%	34%	80%
Loft insulation	20%	6%	75%	15%
SWI	7%	0%	0%	19%

Base: All households (468), Affordable Warmth (220), CSCO (77), CERO (171); Note: Column percentages sum to more than 100% because households could have more than one measure installed; excludes households that had other measures (draught proofing or hot water cylinder insulation) installed (1% of households)

The economic profile of ECO households

- 2.4. Figure 2.2 summarises the economic profile of households (note that the data relate to households that had ECO measures installed in September 2013). Affordable Warmth is aimed at low income and vulnerable householders living in private housing, and the household profile reflects this. Some 90% of households that had ECO measures installed under Affordable Warmth reported that they or someone in their household received benefits³⁹ (6% of households stated that neither they nor anyone in their house

³⁹ Households were asked if they or anybody in their household received any of the following benefits: Job seekers allowance; Income support; Employment support allowance; working tax credit; child tax credit; pension credit; housing credit; council tax benefit; disability living allowance; other state benefits

received benefits)⁴⁰. Over a third of Affordable Warmth households (36%) noted that they experienced difficulties in keeping up with energy bill payments. CERO targets all income groups living in properties that are usually more expensive to insulate. Eligibility for CERO is thus not necessarily income-driven, and the economic profile of households reflects this; some 44% of households that had measures installed under CERO described themselves as ‘managing well’ in keeping up with energy bill payments, and around half (51%) reported annual household income of less than £16,000 (compared to 77% of Affordable Warmth households, for instance).

Figure 2.2: Economic profile of households that received ECO measures, by obligation

Economic profile		% of ECO households			
		All households	Affordable Warmth households	CSCO households	CERO households
Annual household income	Less than £9,500	35%	38%	43%	27%
	£9,500-£15,999	31%	39%	24%	25%
	£16,000-£34,999	22%	17%	19%	28%
	£35,000+	12%	5%	14%	20%
	Less than £16,000	66%	77%	67%	51%
Households receiving benefits	Yes	69%	90%	45%	50%
	No	26%	6%	47%	42%
How well keeping up with energy bills	Managing well	34%	27%	32%	44%
	Getting by alright	38%	34%	49%	39%
	Financial difficulties	25%	36%	16%	14%

Base: All households (468), Affordable Warmth (220), CSCO (77), CERO (171); Note: chart excludes ‘Prefer not to answer’ and ‘Don’t know’ responses

Housing and tenure type of ECO households

2.5. As Figure 2.3 shows, in terms of tenure, the majority of ECO households (that had measures installed in September 2013) were owner occupiers (76% of all households), with the remainder either private renters or social tenants. Reflecting the intended focus of Affordable Warmth, 25% of households with measures installed under the obligation were private renters. Some 19% of CSCO households were social tenants, as were 11% of CERO households.

⁴⁰ Means-tested benefits are a pre-requisite under Affordable Warmth; whilst research could not determine this figure is not 100%, potential explanations include that survey respondents had moved off benefits since receiving an ECO-funded installation, or were unaware that someone within their household was in receipt of eligible benefits

Figure 2.3: Housing and tenure type of ECO households, by obligation

Housing and tenure profile		% of ECO households			
		All households	Affordable Warmth households	CSCO households	CERO households
Tenure	Owner occupier	76%	75%	73%	79%
	Private rented	17%	25%	8%	9%
	Social tenant	7%	0%	19%	11%
Property type	House/ bungalow	85%	94%	96%	68%
	Flat/ maisonette	15%	6%	4%	32%

Base: All households (468), Affordable Warmth (220), CSCO (77), CERO (171)

Location of ECO households

2.6. Figure 2.4 shows the region/ devolved administration that ECO households were based in, and whether they were located in an urban or rural area (note that data relate to households that had ECO measures installed in September 2013). Around two thirds (68%) of ECO households were based in urban areas.

Figure 2.4: Location and urbanity of ECO households, by obligation

Location and urbanity profile		% of ECO households			
		All households	Affordable Warmth households	CSCO households	CERO households
Region/ Devolved Admin.	England & Wales	89%	86%	99%	88%
	Scotland	11%	14%	1%	12%
Urban/rural status ⁴¹	Urban	68%	77%	83%	50%
	Mixed urban/rural and only rural	32%	23%	17%	50%

Base: All households (468), Affordable Warmth (220), CSCO (77), CERO (171)

⁴¹ Urban areas are defined as those in which the population density is greater than 7 persons per hectare, Mixed urban/rural (or suburban) areas are defined as those in which the population density is greater than 1.5 persons per hectare but less than 7 and rural areas are defined as those in which the population density was less than 1.5 persons per hectare.

Summary of the characteristics of ECO households, by obligation

2.7. Preceding sub-sections have presented a range of data on the characteristics of households from the three ECO obligations, together with an aggregate summary of the characteristics of all households that received ECO funded installations. Figure 2.5 presents a summary profile of households within the three ECO obligations. Note that this profile identifies household characteristics that are significantly different from at least one other ECO obligation (e.g. 90% of Affordable Warmth households received a boiler under ECO, which is significantly higher than the proportion under CSCO or CERO).

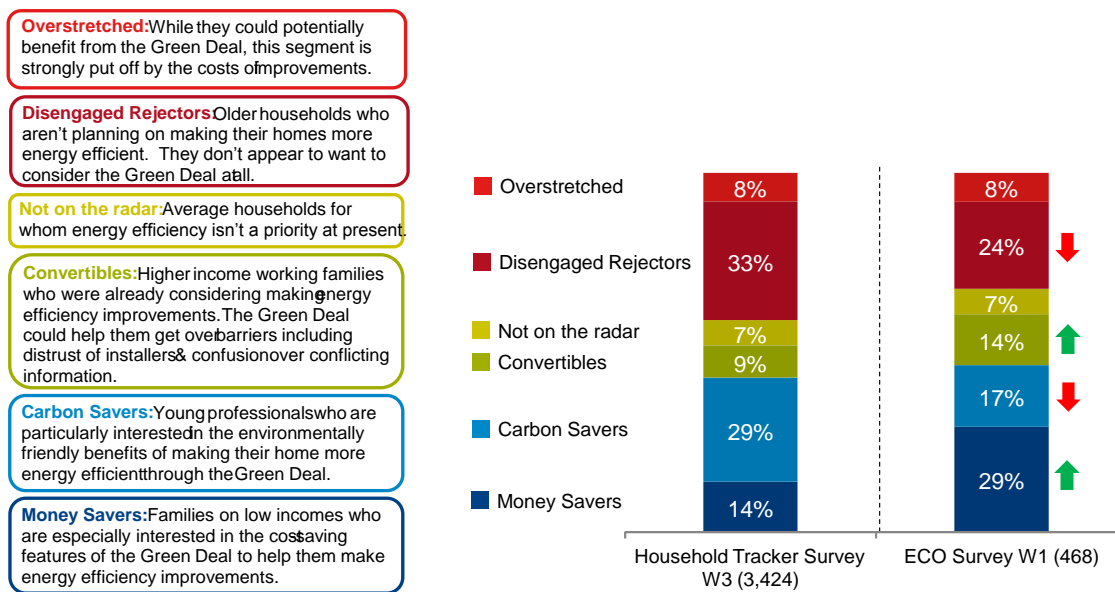
Figure 2.5: Summary of the key characteristics of households that received ECO funded installations in September 2013, by obligation (% of households shown in brackets)

Affordable Warmth had a comparatively high proportion of households that...	CSCO had a comparatively high proportion of households that...	CERO had a comparatively high proportion of households that...
<p>...received a boiler replacement (90%)</p> <p>...were in receipt of benefits (90%)</p> <p>...were private renters (25%)</p> <p>...had an annual household income under £16,000 (77%)</p> <p>...were having difficulties keeping up with energy bills (36%)</p> <p>...were located in urban areas (77%)</p>	<p>...received loft insulation (75%), and/or in some cases CWI (34%)</p> <p>...were not in receipt of benefits (47%)</p> <p>...were social tenants (19%)</p> <p>...were getting by alright in keeping up with energy bills (49%)</p> <p>...were located in urban areas (83%)</p>	<p>...received CWI (80%), and/or in some cases SWI (19%)</p> <p>...were not in receipt of benefits (42%)</p> <p>...were social tenants (11%)</p> <p>...had an annual household income over £35,000 (20%)</p> <p>...were managing well in keeping up with energy bills (44%)</p> <p>...were located in a mixed urban/ rural area or rural only area (50%)</p>

Market ‘segmentation’ of ECO households

- 2.8. As part of a programme of work relating to the Green Deal, in 2012 GfK NOP carried out research for DECC to explore different households’ attitudes to energy efficiency measures⁴². This work led to the creation of a ‘segmentation’ of households, based on their household characteristics, their attitudes towards energy efficiency installations, their willingness to pay for measures, and their motivations (e.g. whether they were driven by a wish to reduce household bills).
- 2.9. Figure 2.6 shows the proportion of households in Great Britain within the six segments, and also shows the proportion of ECO households from this study that fell within each of these six segments. Almost a third (29%) of ECO households were categorised as ‘money savers’ (defined as households on low incomes, who were interested in energy efficiency measures in order to reduce household energy bills). This was a higher proportion than was the case across all British households⁴³, where 14% of households were classed as ‘money savers’. This again highlights the focus of ECO on low income/vulnerable households. ECO households were also more likely than the British household population as a whole to fall within the ‘convertibles’ group, which consisted of higher-income families that were interested in energy efficiency measures, but which faced barriers to proceeding with installation (e.g. distrust of installers, or confusion over information).

Figure 2.6: Proportion of ECO households within household segments (developed to describe attitudes to energy efficiency measures), and how this compares to all British households



Base: Household Tracker Survey (3,424)⁴⁴, ECO Survey (468); note ↑ ↓ denotes significance between ECO households and British population as a whole

⁴² GfK NOP and Kantar Media Research for DECC (November 2012) Green Deal Segmentation: Report of a Segmentation of Owner Occupiers and Private Rented Tenants in Great Britain; available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49750/Green_Deal_segmentation_-_research_report.pdf

⁴³ The Household Tacker Survey W3 fieldwork took place in November 2013, which is similar to the fieldwork for the ECO customer survey (November and December 2013)

⁴⁴ See <https://www.gov.uk/government/publications/green-deal-household-tracker-wave-3>

3. Initial engagement with ECO



The first step in the ECO customer journey is initial engagement with the ECO programme. This chapter explores the ways in which households were ‘recruited’ to ECO, and looks at their motivations to participate.

Key messages

- Household engagement with ECO was typically a reactive process, whereby households were approached and informed that they could have an energy efficiency measure(s) installed for free or at a reduced rate. Around a third of all households (32%) had been introduced to ECO through via a door-to-door sale (someone had called at their property). Other approaches that households had experienced included: telephone calls (5% of households), or bring approached by a salesperson in the street or in a shop (3%). A further 11% of households were introduced to ECO via a leaflet or a letter in the post. Some 13% of households reported that they had been informed about ECO by their landlord, local authority or housing association.
- Of the households that had been approached directly⁴⁵, a third (36%) reported that they had been approached by multiple organisations. Half (56%) of this sub-group of households⁴⁶ saw the ‘choice’ of ECO organisations as a positive, but a quarter (24%) felt that an approach by multiple organisations had pressurised them into having work done. Qualitative interviewees reported that they had received mixed and conflicting messages when approached by multiple organisations, for example in relation to the suitability of their property for the installation of specific types of measure.
- There were a wide range of reasons why households decided to proceed with their ECO installation having been approached. The perceived benefits – money savings (47% of households), a warmer home (45% of households) – were important motivations for many, as was the offer of home improvements for free or at a reduced price (44% of households). Some households reported that they had proceeded because measures were recommended by their landlord/ housing association (5%) or by friends/ family (2%); 9% of households reported that they

⁴⁵ A ‘direct approach’ was defined as one of the following: door-to-door sale; telephone call(s); or approached in the street or in a store. Note that the survey did not ask respondents to identify the organisation that had carried out the direct approach

⁴⁶ Note that this sub-group had a very low base (n=56), so the results should be treated with caution

had not had a choice – their landlord/ housing association had made the decision on their behalf. Qualitative interviews found that some households had valued having measures recommended to them, since this added legitimacy. For example, some interviewees noted that a recommendation from a landlord/ housing association, or from friends and neighbours, was a key factor that had persuaded them to proceed with an ECO installation.

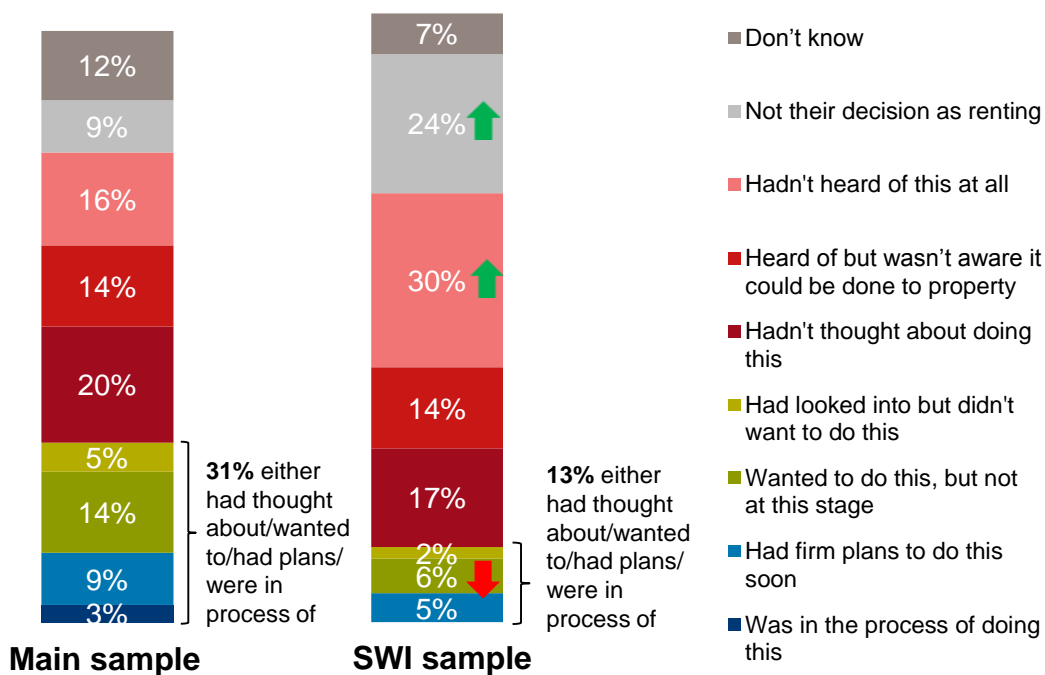
- Before they first engaged with ECO, most households (59%) indicated that they had never previously considered installing the measure that they went on to receive. Reasons for this stated by the household included: that they had never heard of it, did not think it could be done to their property, or because they were renting and assumed it was not their decision to make. Some 12% of households reported that they either had firm plans to install the measure or were in the process of doing so when they first engaged with ECO (amongst households that received SWI the proportion was lower at 5%).

Households' awareness of energy efficiency prior to ECO involvement

- 3.1. As part of the household survey, respondents were asked whether they had ever considered installing their ECO-funded measure prior to engaging with the ECO programme (Figure 3.1). Across all households of the main sample, 12% of households had either made firm plans to install the measure, or were in the process of doing so when they first engaged with ECO. Another 20% of households had never previously thought of installing the measure and 9% reported that they were renting, which meant that they saw it as 'not their decision'.
- 3.2. Amongst households that had SWI installed through ECO, it was more likely that households either had never heard of SWI (30% of SWI households compared to 16% of all households) or believed that the installation of measures was not their decision because they were renting (24% of households).
- 3.3. Though not shown in Figure 3.1, households that had boilers installed were slightly more likely to have had firm plans/ already be in the process of installing (16% of such households, compared to 12% of all households).

Figure 3.1: Whether households had considered installing their ECO-funded measure(s) prior to their engagement with the ECO programme

Question D1: Before you first found out that you might be able to have the measure(s) installed for free/at a reduced price, to what extent had you thought about making the improvements? This could include doing the work yourself, or getting someone else into install the measure(s) for you



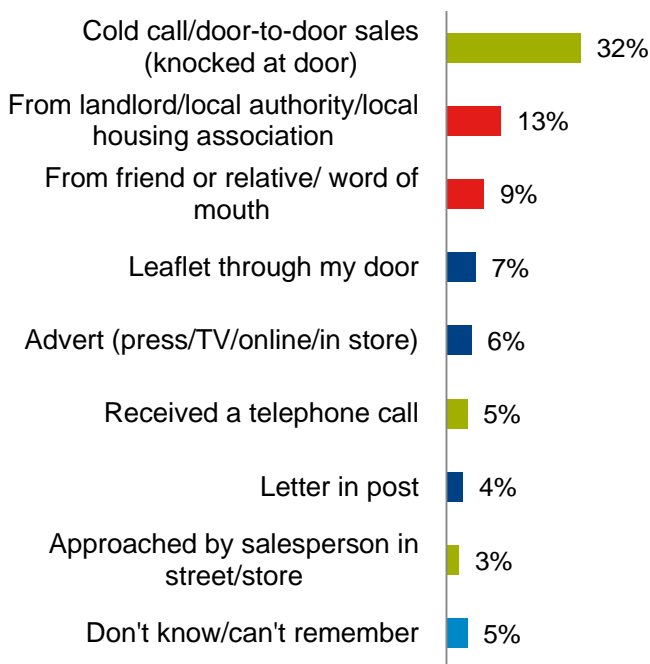
Base: Main sample, all households (468); SWI sample (166); Note: In some cases households were answering about more than one measure, therefore percentages add up to more than 100%; ↑↓ denotes significance between SWI and main sample

Households' engagement with ECO

- 3.4. Figure 3.2 shows the way in which households were first approached and told that they could have free or reduced cost measures installed, and followed-up on this contact (i.e. the main method of approach that led them to further investigate what support they could receive). Note that households were not necessarily told that this support was provided via the 'ECO programme', as Chapter 6 discusses.
- 3.5. Around a third (32%) of households had been approached via a door-to-door sale (someone had called at their property), which was the most common type of approach. Other 'direct' methods of introduction to ECO included telephone calls (5% of households) and contact by a salesperson in the street or in a shop (3% of households). Altogether, 41% of households reported that they had been approached directly and introduced to the ECO programme (see below for further analysis).
- 3.6. In other cases, households were introduced to ECO through recommendations by intermediary organisations. Some 13% of households reported that they had first been approached by their landlord or a representative from their local authority or housing association. A further 9% of households had had ECO recommended by a friend or family member, highlighting the importance of word of mouth communication in alerting households to ECO.

Figure 3.2: The main way in which households were approached and told they could have ECO-funded measures installed

Question C6: Which one did you respond to or at which did you agree to find out more about having the measure(s) installed?



Base: All households (468); Note: chart shows all mentions given by 3% or more of households; Green bars represent 'direct' approaches, which are analysed in more detail below

Direct approaches to households

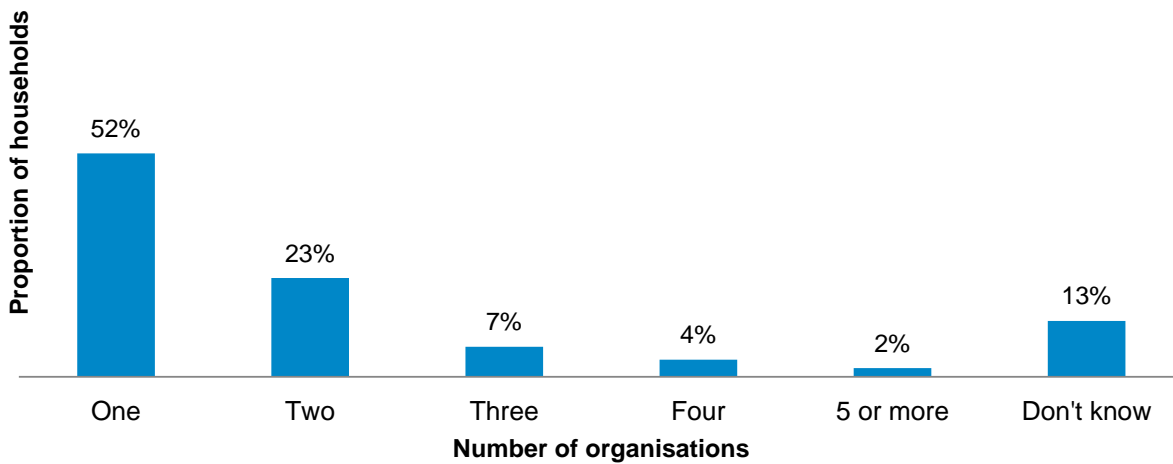
3.7. This sub-section of the chapter analyses the experiences of a specific sub-group of households: those that were directly approached⁴⁷ about ECO.

The number of organisations that approached households about ECO

3.8. Households were sometimes approached by multiple organisations about having an ECO-funded installation carried out (Figure 3.3). Of those households that had been approached directly⁴⁸, 36% reported that they had been approached by more than one organisation, with 2% having been approached by at least five organisations.

Figure 3.3: The number of organisations that had approached those households that had been introduced to ECO via a 'direct' approach

Question C10: How many organisations in total approached you about having the measure(s) installed, including the one you decided to move forward with?



Base: All households that responded to/agreed to find out more about having a measure installed following a direct approach from a company/organisation (door-to-door sale/ telephone call/ approached in store/street) (179)

3.9. Of the households that were introduced to ECO via a direct approach by more than one organisation⁴⁹, 42% reported that they had chosen the services of the first organisation that had been in touch⁵⁰. A further 44% of this sub-group of households had chosen the services of the last organisation that had been in touch, and 7% had chosen one of the others.

3.10. Households that had been approached directly by more than one organisation⁵¹ were asked to indicate the extent to which they agreed or disagreed with statements concerning the effects of multiple visits (summarised in Figure 3.4). Just over half (56%) of this sub-group of households believed that it was good to have a 'choice' of organisation and by implication thus regarded multiple approaches positively. Some 8%

⁴⁷ A 'direct approach' was defined as one of the following: door-to-door sale; telephone call(s); or approached in the street or in a store

⁴⁸ Defined as via one of the following: door-to-door sale; telephone call; or approached in store/street

⁴⁹ Note that this sub-group had a very low base (n=56), so the results should be treated with caution

⁵⁰ Question C12. Which organisation did you decide to have the installation with?

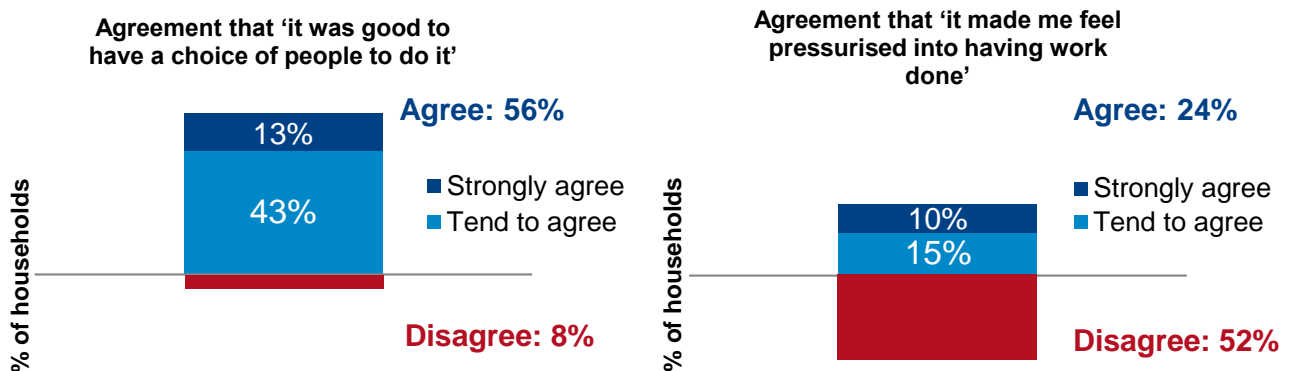
⁵¹ Note that this sub-group had a very low base (n=56), so the results should be treated with caution

of this sub-group of households did not agree that it was good to have a ‘choice’ or organisations.

- 3.11. Around a quarter of households that had been approached directly by more than one organisation⁵² (24%) reported that being approached by more than one organisation had made them feel ‘pressurised’ into having work done under ECO. Around half of this sub-group of households (52%) did not feel that this was the case.

Figure 3.4: Households’ views on being approached by more than one organisation concerning having their ECO measure(s) installed

Question C11: To what extent do you agree or disagree with each of these things about being approached by more than one organisation to have the measure(s) installed?



Base: All households that responded to/agreed to find out more about having a measure installed following a direct approach from a company/organisation (door-to-door sale/ telephone call/ approached in store/street) and were approached by more than one organisation (56); Note: Charts exclude ‘Neither agree nor disagree’ (34% and 22%) and ‘Don’t know’ (1% and 2% respectively) responses

- 3.12. Qualitative interviews included households that had been approached by several different organisations regarding ECO, often within a short space of time. These interviewees described this process as follows:

“Anybody and everybody comes to the door. We’ve had all sorts of energy people...we’ve had numerous boiler people coming round, even since we have had the boiler done, but we’ve had a lot through the post about boilers also”.

Owner Occupier, 78 years (Affordable Warmth, boiler replacement)

“It was [called] some sort of green something...the funny thing was they came back on a regular basis. I think I had about seven different people keep coming up [to the flat] and asking me if I was interested in it and they were the same company, and it was within a space of three weeks...”

Owner Occupier, 58 years (CSCO, loft insulation top up)

- 3.13. There was also evidence from the qualitative interviews that householders were receiving ‘mixed messages’ from different organisations about why they were eligible for support and indeed what measures they should have installed. Such interviewees noted that the confusion that this caused had affected their confidence in ECO and led to an initial reluctance to go ahead with the installation. According to one interviewee:

“We originally had a phone call from someone saying ‘are you aware that you are in a catchment area, postcode area, and we can come and do your loft insulation for free’...I

⁵² Note that this sub-group had a very low base (n=56), so the results should be treated with caution

think they said benefits people get cherry picked first and if there's any money left over then they go to people who then become eligible for the grant....The first lot of people... told us that our walls were not suitable for cavity wall insulation. We had a second company come out then who did an initial inspection. We told the assessor we've been here before and there is an issue with our walls and it's unsuitable for cavity wall insulation...he then came back and said there's no issues with your walls it's definitely suitable for cavity wall insulation...I think if we hadn't known so many people who had got things done under the same sort of scheme we would have been a bit more cautious about getting things done ourselves"

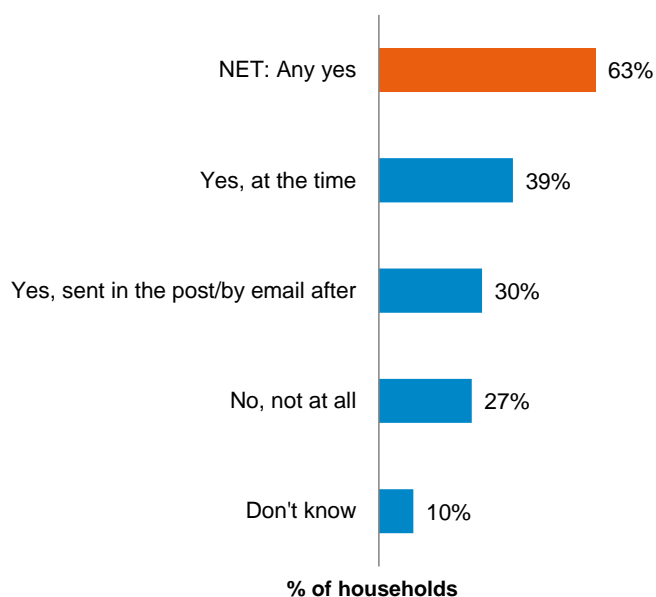
Owner Occupier, 39 years (CSCO, loft insulation and CWI)

The provision of information to households that were directly approached about ECO

3.14. Households that were approached directly about ECO were asked whether they were provided with any written information about ECO (Figure 3.5). The majority (63%) of this sub-group of households reported that they were provided with information, either there and then or by follow-up communication (e.g. by post). Around a quarter (27%) of households that were approached directly reported that they had not been provided with any written information about ECO.

Figure 3.5: Whether households were provided with information about ECO

Question C16: Were you given or sent any written information after you had spoken with the person who knocked on your door/ telephoned/ approached you in the street/in store?

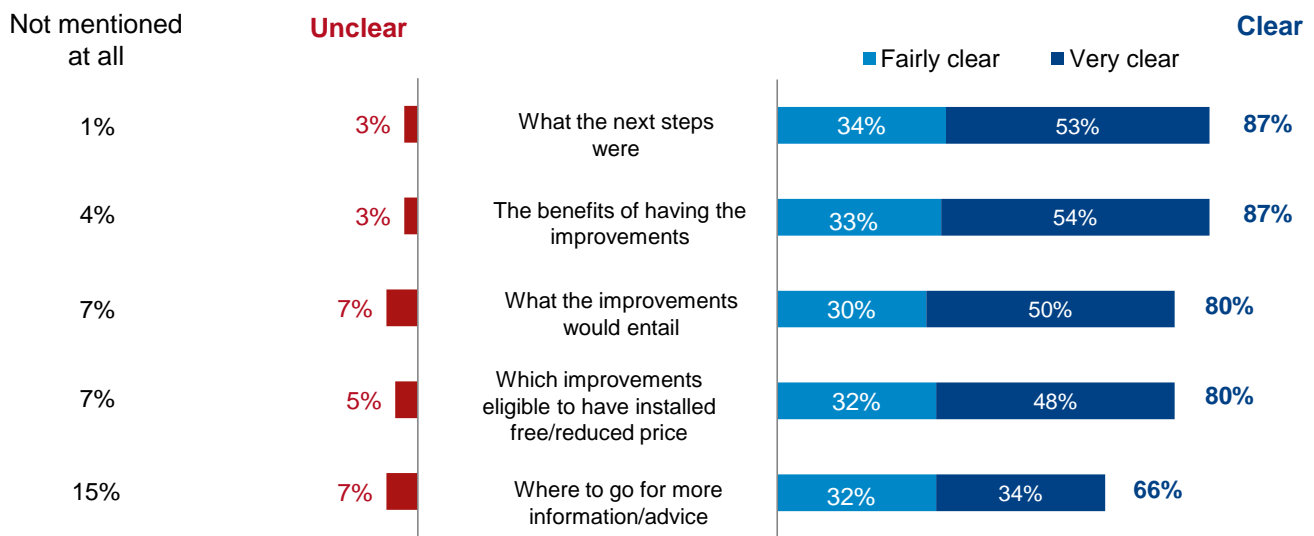


Base: All households that responded to/agreed to find out more about having a measure installed following a direct approach from a company/organisation (door-to-door sale/ telephone call/ approached in store/street) (179)

3.16. Those households that were directly approached about ECO were also asked about the clarity of the information that was provided to them about ECO (Figure 3.6). For most households, the information that they had received was rated as either ‘very clear’ or ‘fairly clear’, particularly in terms of the next steps and the benefits of having measures installed (both rated as clear by 87% of households). A minority of households reported that key features of ECO were not mentioned (typically between 1% and 7% of households reported that this was the case). Some 15% of households reported that information about where else to go for information and advice was not mentioned.

Figure 3.6: The clarity of the information provided to households that had been directly approached about the ECO programme

Question C17: At that time, how clear were each of these things made to you, if they were mentioned at all?



Base: All households that responded to/agreed to find out more about having a measure installed following a direct approach from a company/organisation (door-to-door sale/ telephone call/ approached in store/street) (179); note: chart excludes ‘neither clear nor unclear’ responses (which ranged from 3% to 7%) and ‘don’t know’ responses (which ranged from 1% to 5%), and therefore percentages do not sum to 100%

Households’ decision-making regarding ECO-funded installations

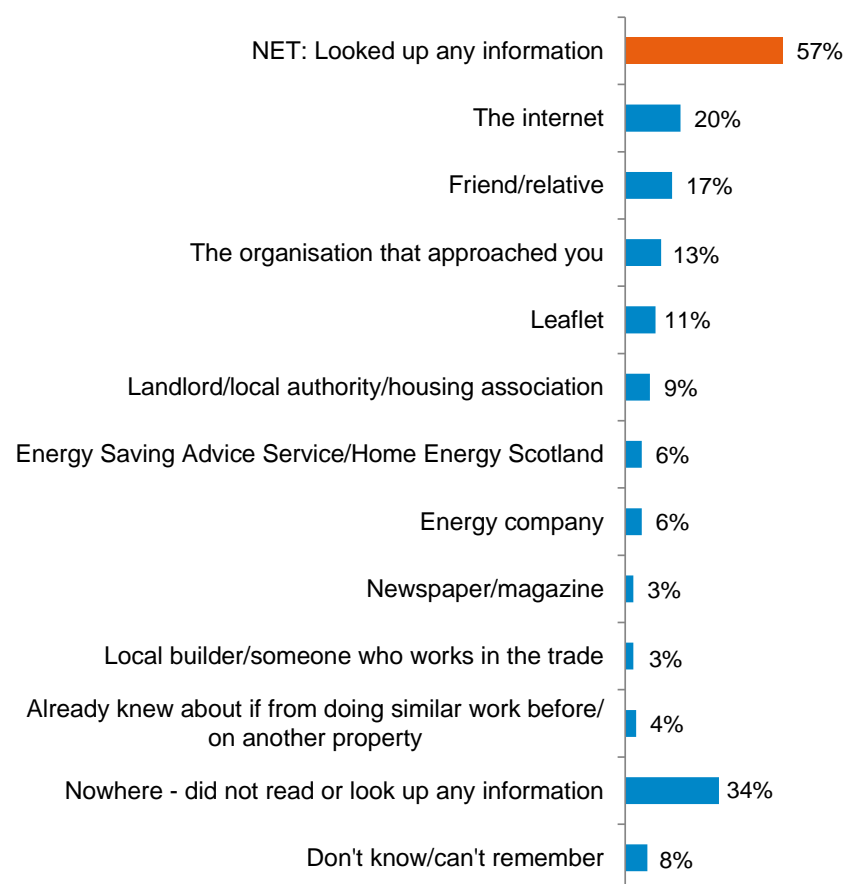
3.17. Research with all households explored why they had chosen to proceed with an ECO-funded installation (bearing in mind that all survey respondents and qualitative interviewees had completed the customer journey, and thus this research does not capture the experiences of households that dropped out).

Information accessed by households when making a decision

3.18. As Figure 3.7 shows, 57% of households reported that they accessed information when making their decision as to whether to proceed with an installation. Around a third of households (34%) reported that they did not read or look up any information. Where information was accessed, common sources included: written material (such as the internet, leaflets etc.); friends and family; and intermediary advice (which could potentially include the organisation that had approached the household in the first place).

Figure 3.7: Sources of information used by households when making a decision as to whether to proceed with their ECO-funded installations

Question D3: When you were making a decision on whether or not you wanted to consider having the measure(s) installed did you ask for, read or look up any information in any of these places?



Base: All households (468); Note: chart shows all mentions given by 3% or more of households; multiple answers were permitted so does not sum to 100%

Motivations for proceeding with an ECO-funded installation

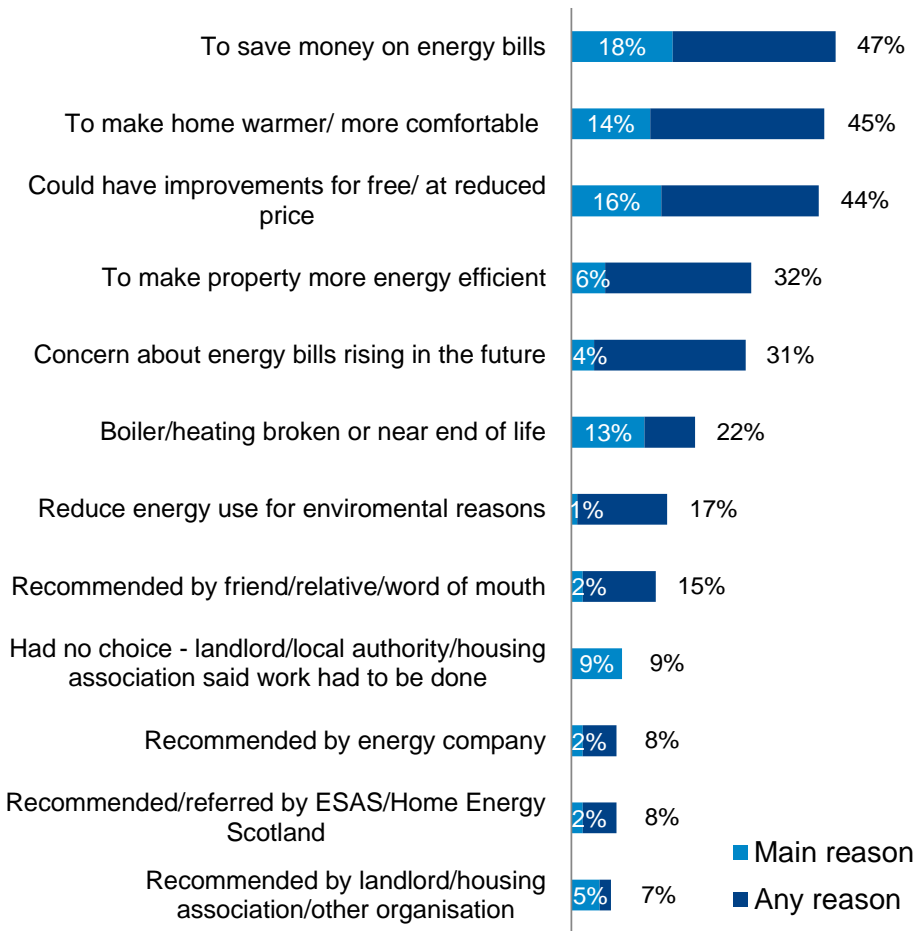
- 3.19. Survey respondents were provided with a selection of potential benefits to having a measure installed under ECO, and were asked to indicate which of these were the reasons why they had elected to proceed with an installation, and also which was the main reason. It should be noted that some of these motivations were measure specific (e.g. to replace a broken boiler), some were context specific (e.g. households had no choice because their landlord had said the installation would proceed), and in other cases it is possible that households may not have been aware of the benefit (e.g. if the organisation that had approached them about ECO had not indicated that this would be the case).
- 3.20. In terms of the *main* reason for proceeding with an ECO-funded installation, as Figure 3.8 shows, there was a wide diversity of motivations, with no single factor accounting for more than 18% of households. For some households, the opportunity to improve their home was important (14% of households cited a desire to make their home warmer/more comfortable as their primary motivation), whilst other households were motivated by the opportunity for financial savings (18% wished to save money on energy bills, whilst 4% were concerned about the future cost of energy). In other cases, households were driven by opportunity: their boiler had broken or was nearing its end (13% of

households), or they were simply motivated by the offer of free/ reduced price improvements (16% of households).

3.21. In terms of more general motivating factors ('any reason' in Figure 3.8), three factors emerged as key considerations (mentioned by at least 40% of all households): to save money on bills (47% of households); to make the house warmer (45% of households); and the fact that improvements were available for free/ at a reduced price (44% of households).

Figure 3.8: The reasons why households proceeded with an ECO-funded installation

Question D4: What were your reasons for wanting to have the measure(s) installed? Question D5: Which one of these would you say was the main reason for wanting to have the measure(s) installed?



Base: All households (468); Note: chart shows all mentions given by 7% or more of households; note: for 'any reason' multiple answers were permitted so does not sum to 100%

3.22. Households' reported main motivations for proceeding with an ECO installation varied according to the type of measure that was installed. Households that had SWI or loft insulation installed were more likely than all households to have done so to make their home feel more warmer/ more comfortable (29% of SWI households and 32% of loft insulation households, compared to 14% of all households). SWI and CWI installations appear sometimes be driven by landlord/ housing association recommendations/ intentions, with 26% of SWI installations and 27% of CWI installations going ahead mainly because the households' landlord had recommended them or said the work would be done.

3.23. Qualitative interviews reviewed households' motivations for proceeding with ECO. Interviewees stressed the importance of financial benefits (saving money by reducing

energy bills) as well as the benefits associated with a warmer home. This was particularly true of older individuals. According to one interviewee:

“The main motivation for making energy efficiency improvements for me is for more affordable heating, to spend less on bills and make my pension credit go further but have a house that feels warmer”

Private Renter, 66 years (Affordable Warmth, boiler replacement)

- 3.24. To a lesser extent, households were motivated to proceed with ECO by a wish to ‘make the household more energy efficient’ and to reduce their environmental impact:

“To save money, and if I believe everything about climate change if everybody did a little bit, it might make a difference...”

Owner Occupier, 81 years (Affordable Warmth, boiler replacement)

- 3.25. In addition to the benefits of having measures installed, the offer of free home improvements was a key motivation for many interviewees. For one interviewee, whilst they had been aware of the benefits to SWI, it was the availability of the measure for free (or at reduced cost) that had persuaded them to proceed:

“We knew insulating the walls could help with reducing heat from the house and potential reduce energy bills. I knew some companies charge £500 towards the cost of it. I decided to get in touch with a company I’d heard was doing it for free. We had solid wall insulation done because it was free under a Government-funded offer”.

Owner Occupier, 37 years (CERO, SWI)

- 3.26. Finally, qualitative interviewees stressed the importance of legitimacy within their decision as to whether or not to proceed with ECO. For tenants this legitimacy could come from a connection between ECO and their landlord or housing association (i.e. that their landlord/ housing association was aware of ECO and had recommended it). For other interviewees, speaking with friends, relatives or neighbours that had had similar energy efficiency measures installed was identified as an important factor in deciding whether to have ECO measures installed. Information gathered through the qualitative interviews suggests that households who had measures installed had often sought reassurance and discussed the practical implications of installing measures with family, friends and neighbours. According to one interviewee:

“I think though if we hadn’t known so many people that had had it done we would have been a bit more cautious...done some internet research to make sure this was kosher...but the fact that quite a few family and friends have had it done...the same Government scheme...”

Owner Occupier, 39 years (CSCO, loft insulation)

4. Pre-installation assessments or visits



Where households had agreed to proceed with an ECO-funded installation, the next step in the customer journey was typically an assessment or visit. This served a technical purpose (by measuring up for an installation) and was also an opportunity for customers to receive information about their ECO-funded measure.

Key messages

- Most households (86%) reported that they had received an assessment or visit prior to their ECO-funded installation. Ofgem guidance stipulates that measures funded under CERO and CSCO require a recommendation based on a GD Assessment or Chartered Surveyor's report, but this is not required under Affordable Warmth. That said, households with measures installed under Affordable Warmth typically reported that they had received an assessment/ visit (91% of Affordable Warmth households).
- Assessments often focussed on activities relevant to the measure that was to be installed (e.g. an inspection of the walls in advance of the installation of CWI). There was typically very little discussion of other energy efficiency measures (including those that might be covered by ECO) or energy efficiency more generally (just 18% of households that had had an assessment or visit reported that this had involved discussion of how they used energy, and 9% had involved the 'assessor' looking at their energy bills).
- Assessments/ visits were typically in the 20-60 minute range (60% of households that had an assessment/ visit), though a significant minority lasted less than 20 minutes (18% of households that had an assessment/ visit). Perhaps not surprisingly, visits of under 20 minutes duration were less likely to involve discussion of energy efficiency or household use of appliances, and were instead focussed on activities relevant to the measure being installed (e.g. checking a loft in advance of loft insulation installation).
- Most (67%) households that reported they had had a pre-installation assessment/ visit reported that they had subsequently received written information. This information consisted of 'transactional' type details (e.g. appointment times, quotations), and/or information about energy efficiency improvements. However, a third (32%) of households that had received written information reported that they had not looked at it or used it (at the time of the research – i.e. by the time of the research between two and four months after their assessment/visit).

- Households generally reported that they were clear about key features of their ECO-funded installations following an assessment/ visit. For example, 81% of households that had an assessment/ visit reported that they were clear about what the installation would entail, and 84% were clear about the nature of the improvements that were recommended. Reported clarity was higher where written information was provided to households as part of an assessment/ visit. There were no statistically significant differences in households' reported clarity of understanding depending on whether the assessment/ visit had been a GD assessment or a Chartered Surveyor's visit⁵³.

⁵³ Data on whether households had received a GD assessment, Chartered Surveyor's visit or neither of these (note that this category did not distinguish between did not receive an assessment and received an assessment that was neither a GD assessment nor a Chartered Surveyor's visit) was obtained from the sample information, and was used as part of the cross-break analysis in order to explore whether the type of visit affected households' ECO customer journey

Pre-installation assessments or visits

- 4.1. For measures installed under Affordable Warmth, there is no requirement for any pre-installation assessment or visit⁵⁴. Conversely, under CERO and CSCO, Ofgem's ECO Guidance⁵⁵ stipulates that measures must be recommended via a GD Advice Report produced following a GD assessment, or via a Chartered Surveyor's Report produced following a Chartered Surveyor visit. Across all households, 86% reported that they had received an assessment or a visit prior to the start of their ECO-funded installation (whether a GD assessment, a Chartered Surveyor visit or another type of assessment/visit)⁵⁶. The proportion of households reporting that they had had an assessment/visit ranged from 91% of households that had measure(s) installed under Affordable Warmth, through to 82% of CERO households and 79% of CSCO households⁵⁷.

Scope of pre-installation assessments/ visits

- 4.2. Households that reported that they had had an assessment or visit (whether a GD assessment, a Chartered Surveyor visit or another type of assessment/visit) were asked to indicate what activities had been included within this exercise (Figure 4.1). Assessments/visits typically involved activities that might be thought of as 'measure-led'. For example, 62% of households that had had an assessment/visit reported that someone had looked at their heating system or boiler, and 49% of households reported that someone had inspected their walls. Lower proportions of households reported that their assessment/visit had involved discussion of energy use (18% of households that had had an assessment/visit) and fewer again that the assessment/visit had involved reviewing household energy bills (mentioned by 9% of households that had had an assessment/visit).
- 4.3. Details of the assessment/visit also varied depending on the measure that was installed. For example, households that had loft insulation installed were more likely to report that their assessment/visit had involved a check on the loft (mentioned by 85% of households with loft insulation installed, compared to 48% of all households that had had an assessment/visit). Similarly, households that had had a boiler installed were more likely to report that the assessment had looked at their boiler/heating system (84% of such households), and households that had had CWI installed were more likely to report that the assessment had involved an inspection of their walls (64% of such households). This would suggest that assessments tend to focus on checks of the feasibility of a specific measure, rather than a more general assessment of conditions.

⁵⁴ Defined in this study as 'someone coming round to look at the property and/or measure up'

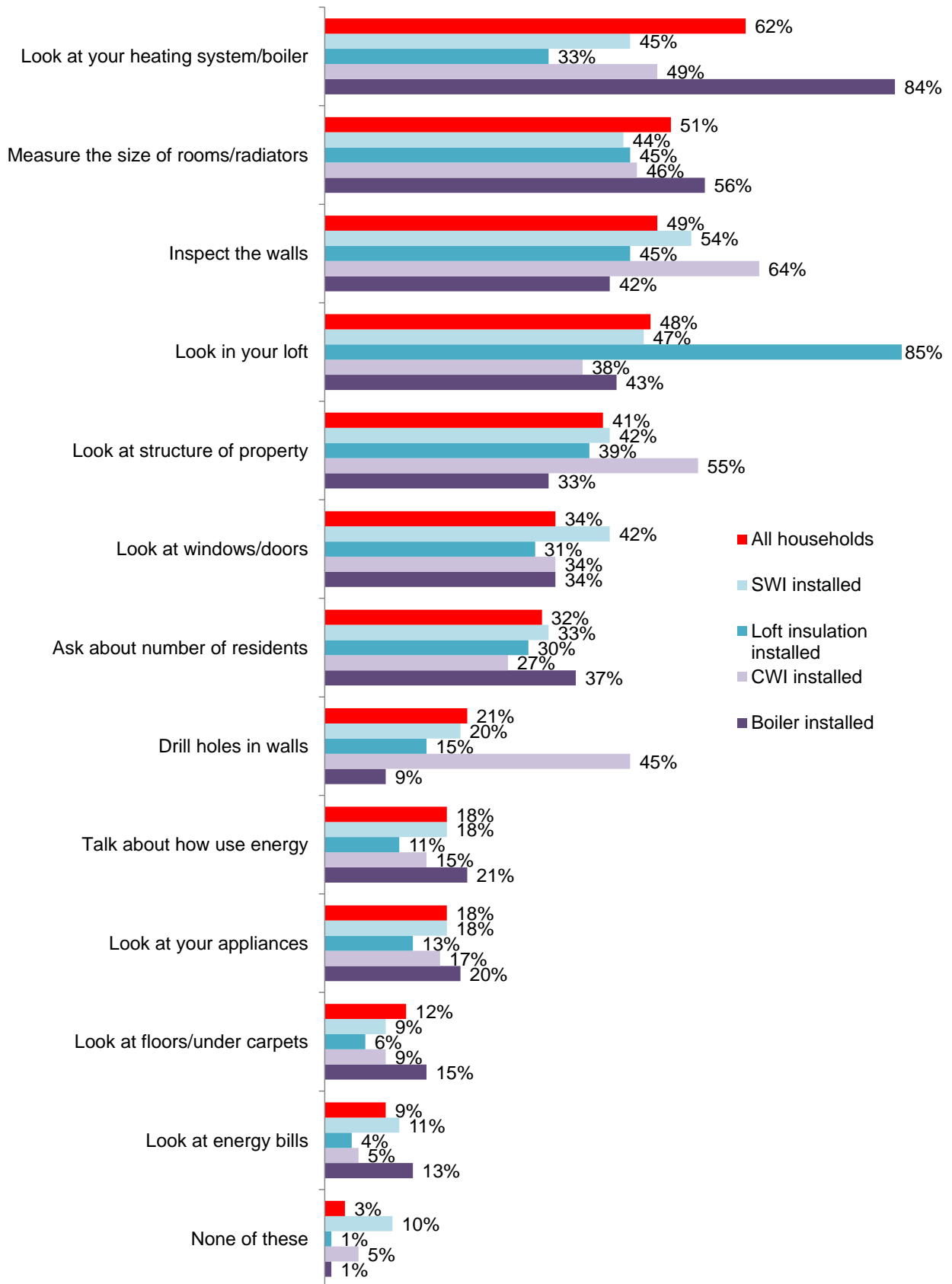
⁵⁵ Ofgem (July 2013) Energy Companies Obligation (ECO): Guidance for Suppliers (Version 1.1)

⁵⁶ Question E1: Did someone come around to talk with you about the measures and how they might be installed? This could include someone coming round to look at your property and/or measure up to install the measure(s). Base: All households (468)

⁵⁷ Note that measures installed under CERO and CSCO both require either a GD assessment or a Chartered Surveyor's visit. Since the proportion of households reporting that they had had such as visit was 82% of CERO households and 72% of CSCO households, this suggests that some households either could not recall their visit, or were not aware that this had taken place (potentially because it had been arranged by another party).

Figure 4.1: Activities reportedly carried out as part of pre-installation assessments/ visits

Question F3: Which of these things did the person who came round do?



Base: Households that had someone visit to talk about the measure(s) and how it/they might be installed (All households – 406, SWI – 133, Loft insulation – 61, CWI – 126, boiler – 185); multiple answers were permitted so does not sum to 100%; excludes ‘don’t know’ (which ranged from 4% to 5%)

- 4.4. Survey data suggest that GD assessments were more likely to include non-measure related discussions than was the case with Chartered Surveyor visits⁵⁸. Some 26% of households that had had a GD assessment reported that it had covered energy use (compared to 11% of Chartered Surveyor visits), and 12% of households reported that their GD assessment had covered energy bills (3% of Chartered Surveyor visits).

Duration of pre-installation assessments/ visits

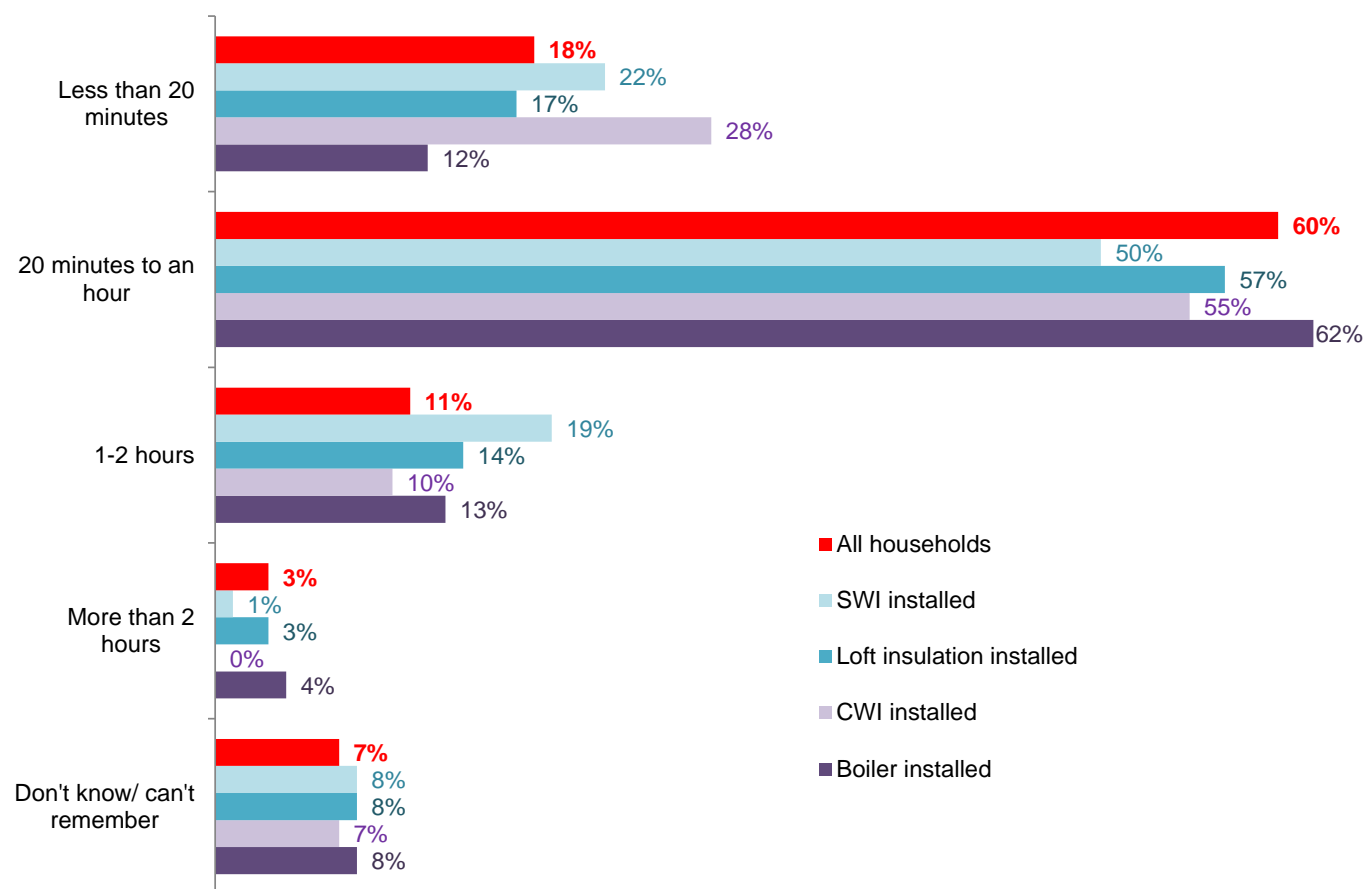
- 4.5. Figure 4.2 shows the reported duration of pre-installation assessments/ visits. The majority (60%) of households that had had an assessment/ visit reported that this had lasted for between 20 minutes and one hour. Some 18% of households reported that their assessment/ visit had lasted for under 20 minutes.
- 4.6. There was some variation in the reported duration of an assessment/ visit depending on the measure that households had installed (also shown in Figure 4.2). Households that had CWI installed under ECO were significantly more likely to have had an assessment/ visit that lasted for under 20 minutes (28% compared to 12% of households that had had a boiler installed, and 6% of households that had had SWI installed). CERO households were more likely than Affordable Warmth households to report that their assessment/ visit had lasted for less than 20 minutes (23% of CERO households compared to 13% of Affordable Warmth households). This finding could be related to the close association between CERO and the installation of CWI which, as noted above, was also more likely to involve an assessment/ visit of under 20 minutes.
- 4.7. There was also variation in the reported duration of an assessment/ visit depending on the range of activities that households reported had taken place as part of the assessment. For example, 31% of assessments that lasted for at least an hour⁵⁹ involved checking appliances (compared to 7% of assessments that lasted under 20 minutes), and 27% of one hour plus assessments involved a discussion of energy use (compared to 7% of assessments that lasted under 20 minutes).
- 4.8. Finally, Chartered Surveyor visits were typically shorter than GD assessments. A quarter of households (26%) that had had a Chartered Surveyor visit reported that it had lasted for less than 20 minutes, compared to 14% of households that had had a GD Assessment. As noted above, Chartered Surveyor visits were typically more focussed on activities related to the installation of specific measures (e.g. checking a loft), whereas GD assessments were more likely to also include discussion of energy use and bills (which as noted above was correlated with longer assessments – no doubt because it added time).

⁵⁸ Data on whether households had received a GD assessment, Chartered Surveyor's visit or neither of these (note that this category did not distinguish between did not receive an assessment and received an assessment that was neither a GD assessment nor a Chartered Surveyor's visit) was obtained from the sample information, and was used as part of the cross-break analysis in order to explore whether the type of visit affected households' ECO customer journey

⁵⁹ Note that this sub-group had a low base (n=62), so the results should be treated with caution

Figure 4.2: The reported duration of the pre-installation assessment/ visit

Question F2: How long in total did the visit take, including any time the person spent looking around your property and speaking with you/your family about what you do and your energy use?



Base: Households that had someone visit to talk about the measure(s) and how it/they might be installed (All households – 406, SWI – 133, Loft insulation – 61, CWI – 126, boiler – 185)

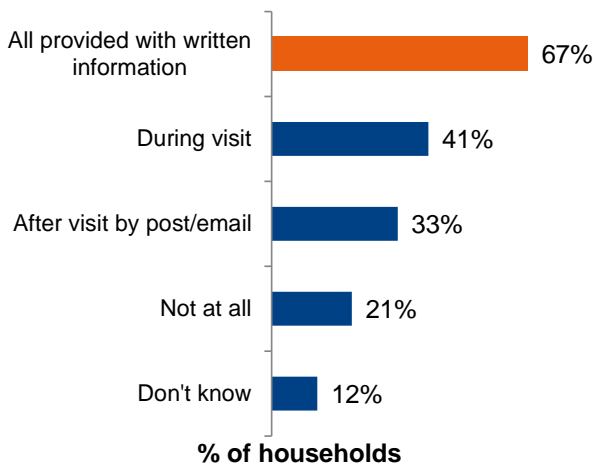
The provision of information and advice as part of assessments/ visits

Whether written information was provided to households

- 4.9. As Figure 4.3 shows, two thirds (67%) of households that had had a pre-installation assessment/ visit reported that they received written information following their assessment/ visit. Written information was commonly provided during the assessment (41% of households that had had an assessment/ visit), or afterwards via post or email (33% of households that had had an assessment/ visit).
- 4.10. Some 21% of households reported that they did not receive any written information following their assessment/ visit. There were no statistically significant differences in the extent of provision of information to households depending on whether the assessment/ visit was a GD assessment or a Chartered Surveyor visit, or depending on the ECO obligation within which households received support, or the measure that they had installed.

Figure 4.3: The proportion of households that received written information following their pre-installation assessment/ visit

Question F6: Were you given or sent any written information about having the measure installed, either during the visit, or in the post or by email after?

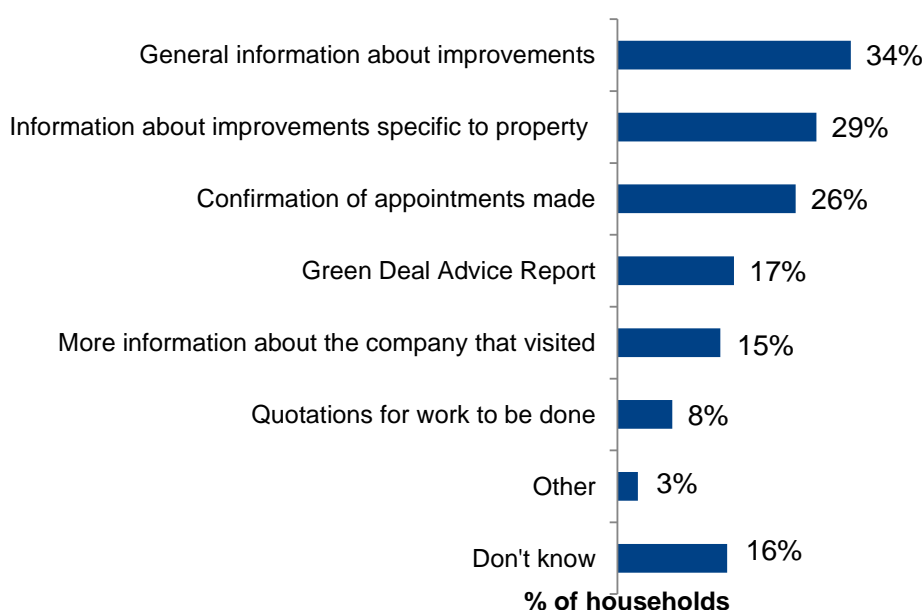


Base: All households that had someone visit to talk about the measure(s) and how it/they might be installed (406); Note: multiple answers were permitted so does not sum to 100%

- 4.12. Households were asked to indicate the type of written information that they were given during or sent following their pre-installation assessment/ visit (Figure 4.4). Much of the information consisted of 'transactional' type details, such as confirmation of appointments, a quotation (since customer payment might be required), and more information on the installer.
- 4.13. Around a third (34%) of the households that received written information reported that they had received general information about improvements that could be made to make houses more energy efficient. Some 29% of households reported that they had received information about energy efficiency improvements that was specific (i.e. tailored) to their house. Some 17% of the households that received written information reported that they received a GD Advice Report following their assessment/ visit.

Figure 4.4: The type of written information provided to households following their pre-installation assessment/ visit

Question F7: What information were you sent?



Base: All respondents that had someone come around to talk about the measures and how they might be installed and were given or sent any written information about having measures installed (273); Note: multiple answers were permitted so does not sum to 100%

- 4.14. Just because households received written information did not necessarily mean that they used it (or even that they looked at it). Some 32% of the households that had received written information reported that they had not used or looked at it⁶⁰. Some 43% had only looked at this written information once (which may be related to the type of information received, since transactional information such as appointment times would only need to be consulted once).

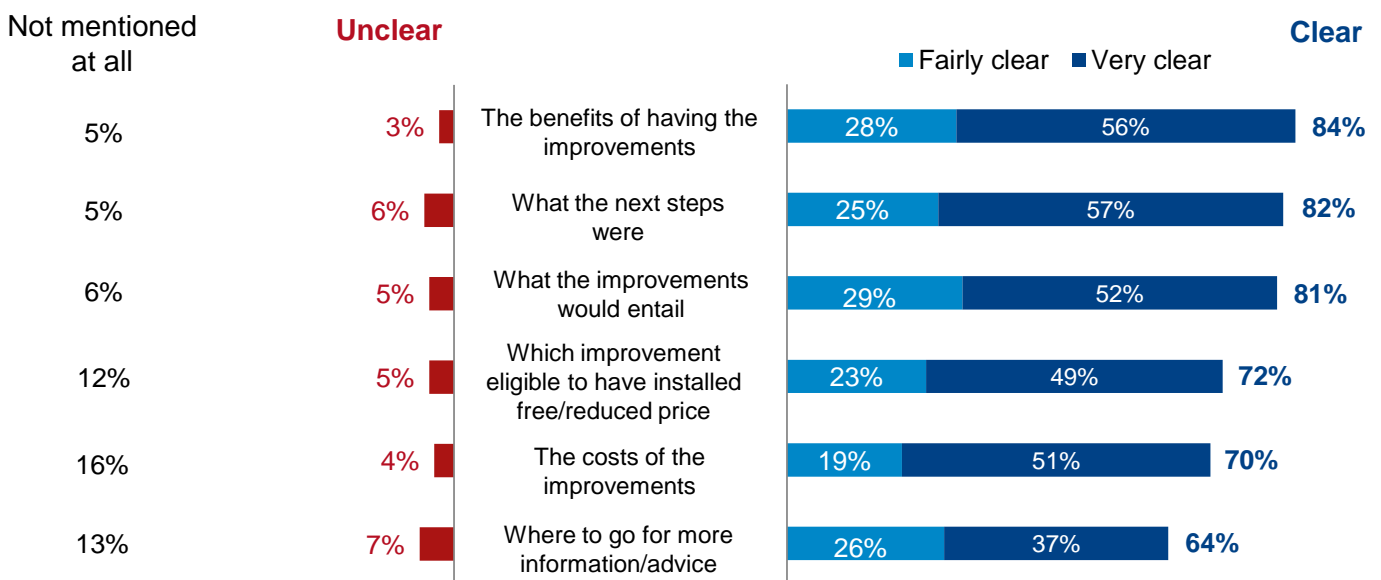
⁶⁰ Question F8. Have you used or looked at the information since you first received it? Base: All respondents that had someone come around to talk about the measures and how they might be installed and were given or sent any written information about having measures installed (except those answering 'Don't know' at F7) (226)

Households' clarity of understanding about ECO-funded improvements

- 4.15. Households were asked to indicate how clear they were about selected features of their ECO-funded installation as a result of the assessment/ visit. The results in Figure 4.5 show that the majority of households reported that they were clear about each selected feature of their ECO-funded installation. This was particularly true of the benefits of having improvements, next steps (i.e. following the assessment/ visit), and what the installation process entailed (over 80% of households that had had an assessment/ visit reported that they were clear about each of these features).
- 4.16. A minority of households (between 12% and 16% of households that had had an assessment/ visit) reported that issues such as cost and eligibility criteria were not mentioned during their assessment/ visit. ECO eligibility is arguably an important topic for discussion with households, since this might have included the provision of advice as to whether households might also be able to have other measures installed in addition to the 'primary' measure that was being discussed.

Figure 4.5: The clarity of the information provided to households as part of the assessment/ visit

Question F10: At that time how clear were each of these things made to you, if they were mentioned at all?



Base: All households that had someone visit to talk about the measure(s) and how it/they might be installed (406); Note: Chart excludes 'Neither clear nor unclear' responses (which ranged from 4% to 10%) and 'Don't know' responses (which ranged from 3% to 6%), and therefore percentages do not sum to 100%

- 4.17. There was evidence that the provision of written information to households improved clarity of understanding. For example, 84% of households that had received written information as part of an assessment/ visit reported that they were clear about eligibility, compared to 62% of households that had not received written information. These statistically significant differences were observed for each of the features listed in Figure 4.5 (benefits of improvements, next steps etc.).
- 4.18. There were no statistically significant differences in households' reported clarity of understanding depending on whether the assessment/ visit had been a GD assessment or a Chartered Surveyor's visit. Note that survey base sizes were too low to enable analysis of whether clarity of understanding varied depending on whether or not written information had been received in the format of a GD Advice Report.

4.19. Households that had had SWI installed under ECO were more likely than households that had had other measures installed to report being unclear about various aspects of their installation following an assessment/ visit. For example, some 12% of households that had an assessment/ visit and had SWI installed were unclear about what their installation would entail (compared to 5% of all households that had an assessment/ visit), and 9% of SWI households that had an assessment/ visit were unclear about the benefits of having SWI installed (compared to 3% of all households that had an assessment/ visit).

Households' confidence and satisfaction with assessments/ visits

4.20. As Figure 4.6 shows, the majority of households reported that they had found their assessment/ visit to be useful in helping them understand what they could do to make their home more energy efficient (86% of households that had had an assessment/ visit).

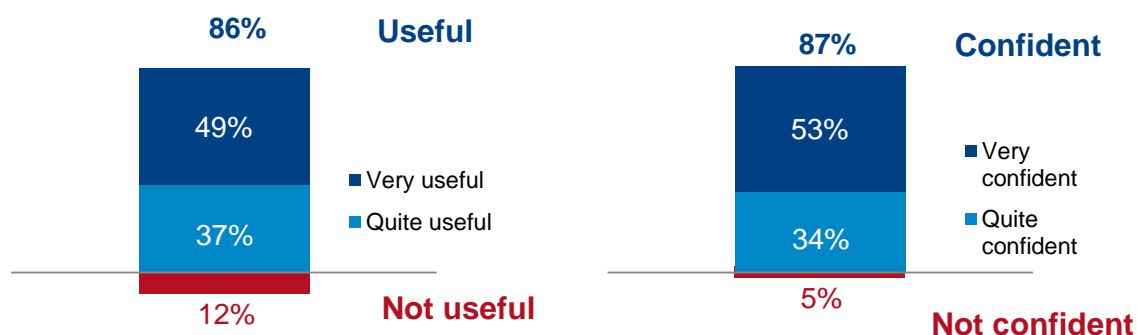
4.21. There was also a high level of reported confidence amongst households with the recommendations that were made by the individual that had carried out the assessment/ visit (87% of households that had had an assessment/ visit).

Figure 4.6: How useful households found the assessment/ visit, and how confident they were in the recommendations that were made

Question F11 How useful was the visit in helping you to understand what you can do to make your home more energy efficient? Question F12: How confident were you in any recommendations made by the person who visited?

Usefulness of the assessment/ visit

Confidence in recommendations made



Base: All households that had someone visit to talk about the measure(s) and how it/they might be installed (406); Note: Chart excludes 'Don't know' responses (3% for F11 and 1% for F12) and 'they did not make any recommendations' responses (7% for F12), and therefore percentages do not sum to 100%

4.22. Assessments/ visits that households reported had lasted for less than 20 minutes were more likely to be viewed as not useful (23% of these households saw their assessment/ visit as not useful, compared to 9% of both households that had had assessments/ visits of 20-60 minutes and households that had had assessments/ visits of more than 60 minutes). There were no statistically significant differences in households' perceptions of the usefulness of the assessment/ visit or their confidence with the recommendations made depending on whether the assessment was a GD Assessment or a Chartered Surveyor visit.

4.23. Households that had received and read written information as part of their assessment/ visit were more likely to view the process as useful (94% of households that had received and read written information rated the assessment/ visit as useful, compared to 80% of households that did not receive written information).

- 4.24. Similarly, households that had received and read written material as part of their assessment/ visit were more likely than other households to have confidence in the recommendations made following their assessment/ visit. Some 99% of households that reported that they had received and read written information as part of their assessment/ visit reported that they were confident in the recommendations they received, compared to 82% of households that had not received any information.

5. Post-assessment actions



This chapter analyses customer decision-making after a pre-installation assessment/ visit, including the factors that affect the process of arranging for an installation to be carried out

Key messages

- Most households (83%) reported that their ECO-funded installations had been carried out by the same organisation that had contacted them in the first place (or that this organisation had arranged the installation on their behalf). Some households (6%) reported that their installation had been arranged by their landlord or similar (this was particularly true of households that had had CWI or SWI installed), and thus they had not had an input into the selection of installer. Just 1% of households reported that they had found and arranged the ECO installation company themselves.
- Focussing on households that indicated that they had decided which installer to use to carry out their installation⁶¹ (i.e. excluding households where the installation was arranged by their landlord/local authority/housing association), just under half of this sub-group of households (45%) reported that they had selected their installer on the basis that this was the only organisation that they had spoken to. A third of households (32%) had decided on their installer on the basis that they were offering to carry out the installation for free. The convenience offered by an installer (e.g. availability of appointment times) and recommendations from friends and family were also factors that survey respondents reported having considered when deciding whether to proceed with their installer.
- Satisfaction with the process of arranging an ECO installer was very high, and between 78% and 81% of all households were satisfied with the information they were provided with, the range of appointment times offered, and how long they had to wait for an appointment.

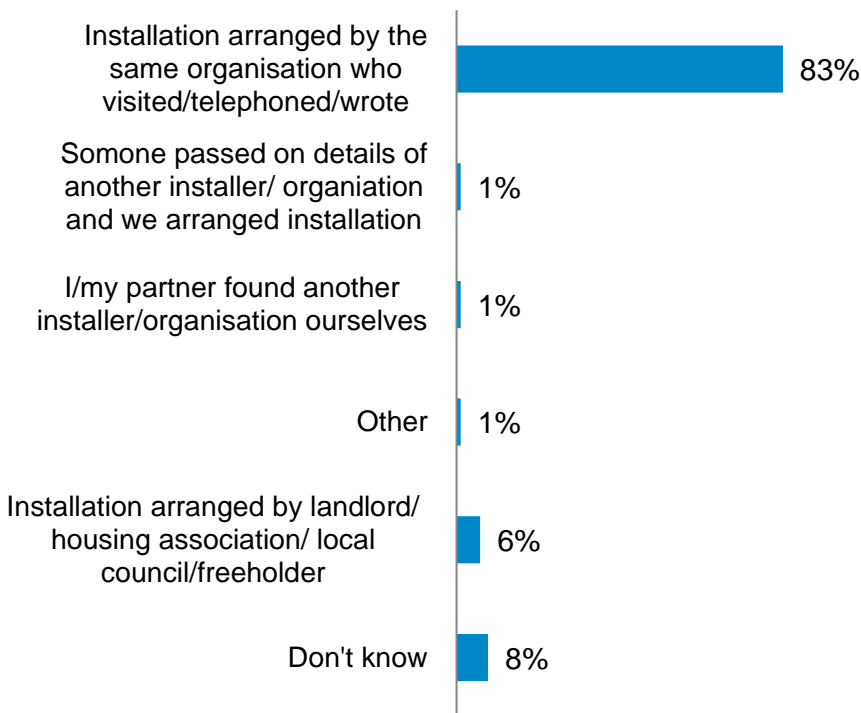
⁶¹ n = 440

Arranging for an installer to carry out ECO installations

5.1. Figure 5.1 shows how households arranged the installation of their ECO-funded measures. For the majority of households (83%), their ECO installation was arranged by the organisation that had first contacted them about ECO (as discussed in Chapter 3). After this, the next most common arrangement was that the installation had been arranged by the household's landlord, local authority or housing association (6% of households). Just 1% of households reported that they had found and arranged the ECO installation company themselves.

Figure 5.1: How households arranged the installation of their ECO-funded measure(s)

Question G1: Which of these best describes how the installation of the measure(s) was arranged?

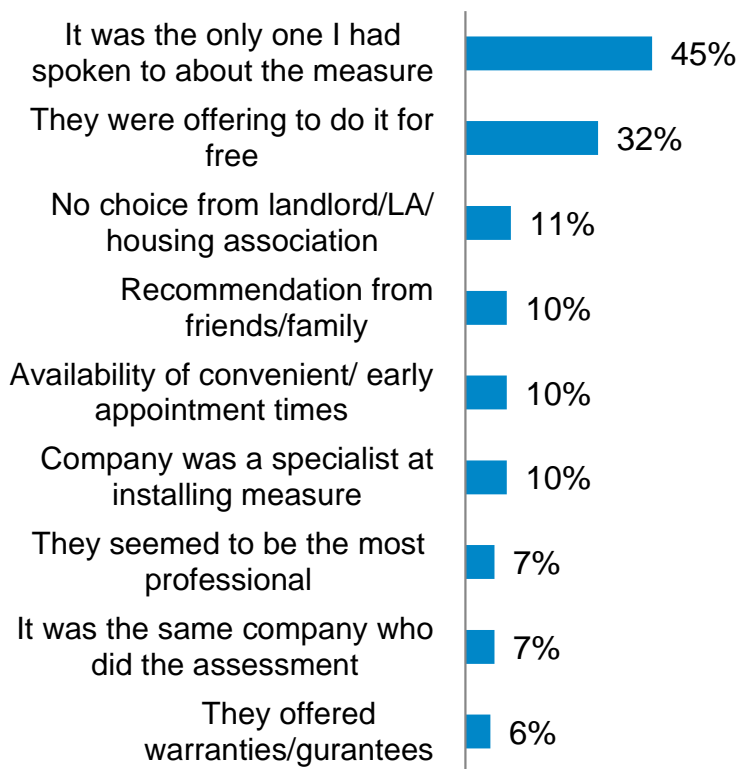


Base: All households (468)

5.3. ECO households were asked to indicate why they had chosen to use the installer that carried out their ECO installations (Figure 5.2). Note that this excludes households where the installation was arranged for households by their landlord or another similar party. Just under half of this sub-group of households (45%) reported that their installer was the first (and only) installer they had spoken to about the possibility of having the measure installed. A third of households (32%) had decided on their installer on the basis that they were offering to carry out the installation for free. After this, various reasons were given by households, including convenience, and a recommendation from family/ friends.

Figure 5.2: How households decided which installer to use

Question G7: Why did you decide to use the installer you used for the measure(s)?



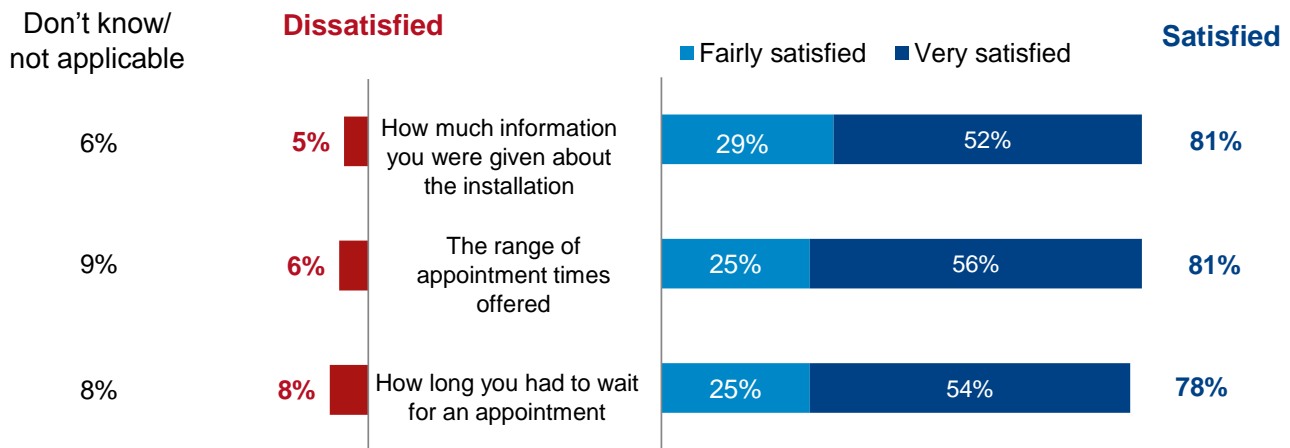
Base: All households except those for whom the installation was arranged by their landlord/local authority/housing association and they had no part to play (436); Note: Chart shows all mentions given by 5% or more of households; multiple answers were permitted so does not sum to 100%

Household satisfaction with the process of arranging an installer

- 5.4. Generally, households appeared to be satisfied with the process of arranging their ECO installation (Figure 5.3). Between 78% and 81% of households (excluding those whose installation was arranged for them) were satisfied with the information they were provided with, the range of appointment times offered, and how long they had to wait for an appointment.
- 5.5. Though not shown in Figure 5.3, higher rates of dissatisfaction were reported amongst households that had had SWI installed. Some 16% of SWI households (excluding those whose installation was arranged for them) were dissatisfied with how much information they were given about the installation (compared to 5% of all households), and 13% were dissatisfied with the range of appointment times that they were offered (compared to 6% of all households). However, levels of dissatisfaction amongst households that had SWI installed were still relatively low.

Figure 5.3: Customer satisfaction with installation arrangements

Question G6: How satisfied or dissatisfied were you with these aspects of arranging the installation for the measure(s)



Base: All households except those for whom the installation was arranged by their landlord/ housing association/ local authority and they had no part to play (436); Note: Chart excludes 'Neither satisfied nor dissatisfied' responses (which ranged from 4% to 7%), and therefore percentages do not sum to 100%

6. Households' installation experiences



This chapter presents analysis of households' experiences of having energy efficiency measures installed in their homes under the ECO programme. This includes a review of whether customers were required to contribute towards funding and whether they were aware that measures were being installed under the 'brand' of the ECO programme.

Key messages

- Households reported that the vast majority of ECO-funded measures (97%) were installed without any requirement that they personally contribute towards the cost of installation. Note that this result concerns measures that were installed in September 2013. A customer contribution was more likely where SWI had been installed (15% of SWI households reported that they had made a financial contribution, compared to 5% of households that had had a boiler installation).
- Households' reported satisfaction with their ECO installations was high, with 86% of households indicating that they were satisfied with the quality of the installers' work, and 85% that they were happy with the quality of the installation. Where there were issues, these appear to have been related to the disruption caused by the installation process, and possibly where installers had left a mess behind them. This was more of a problem where SWI was installed, with 31% of SWI households indicating that they were dissatisfied with how clean/ tidy their property had been left after the installation (compared to 9% of all households).
- Awareness amongst consumers that measures were being installed under the 'brand' of the ECO programme was low, with just 12% of households able to explicitly identify ECO. There is no requirement that the organisations that approach households about ECO ensure that households are aware of the ECO programme. For the most part, households either did not know who had paid for their installation (29% of households), or attributed it to 'the government' (40% of households).

Paying for installations under ECO

- 6.1. Some 3% of all households reported that they had personally paid towards the cost of having a measure installed under ECO⁶², suggesting that amongst households that had measures installed in September 2013, this practice was very uncommon. Amongst households that had had SWI installed⁶³, a customer contribution was more likely, with 15% of SWI households having involved a customer contribution (compared to 5% of households with a boiler installation⁶⁴).
- 6.2. The base size was too small to enable quantitative analysis of the sources of finance that households reported that they had used in order to self-fund installations⁶⁵. However, many of these households that had used finance to self-fund installations reported (in their responses to the quantitative survey) that they had used personal savings to part-fund ECO installations. Other sources identified by households included a loan provided by a bank/ building society, or a loan provided by the installer. Some households noted that they had used Green Deal finance to part-fund the installation, or had accessed Green Deal cashback.
- 6.3. Amongst those households that reported that they had part-funded their installation, most had personally contributed under £1,500, with many contributing less than £500⁶⁶, though the very low base size⁶⁷ means that these results should not be considered representative of the wider population of ECO households that had made a financial contribution.

Customer satisfaction with ECO-funded installations

- 6.4. Households were asked to rate their satisfaction with selected features of their installation (Figure 6.1). The majority of households (between 58% and 68% of households) reported that they were 'very satisfied' with each of the selected features of their installation.
- 6.5. Households that had had SWI installed were less likely to be satisfied with the process than households that had had other types of measure installed. As shown in Figure 6.1, there was some dissatisfaction with the process of SWI installation, and households that had had SWI installed were more likely to be dissatisfied with how clean/ tidy their house had been left (31% of SWI households were dissatisfied, compared to 9% of households for all measures), and also with the professionalism of the installers (14% of SWI households were dissatisfied, compared to 6% of households for all measures).
- 6.6. Relatedly (not shown in Figure 6.1), SWI installations were seen by households to have been more disruptive than was the case for other types of energy efficiency measure. Across all measures, 22% of all households that had a measure installed reported that their day-to-day activities had been disrupted either 'a great deal' or 'to some extent' as a result of having ECO-funded measures installed⁶⁸. The equivalent proportion for

⁶² Question C1: We understand that the energy saving home improvement(s) shown below was/were installed in your home. For each, please say whether it was installed for free, or if you paid towards the cost of installation
n=468

⁶³ n=166

⁶⁴ n=204

⁶⁵ n=18 households (not installations)

⁶⁶ H3 How much in total did you pay towards the cost of having [MEASURE] installed?

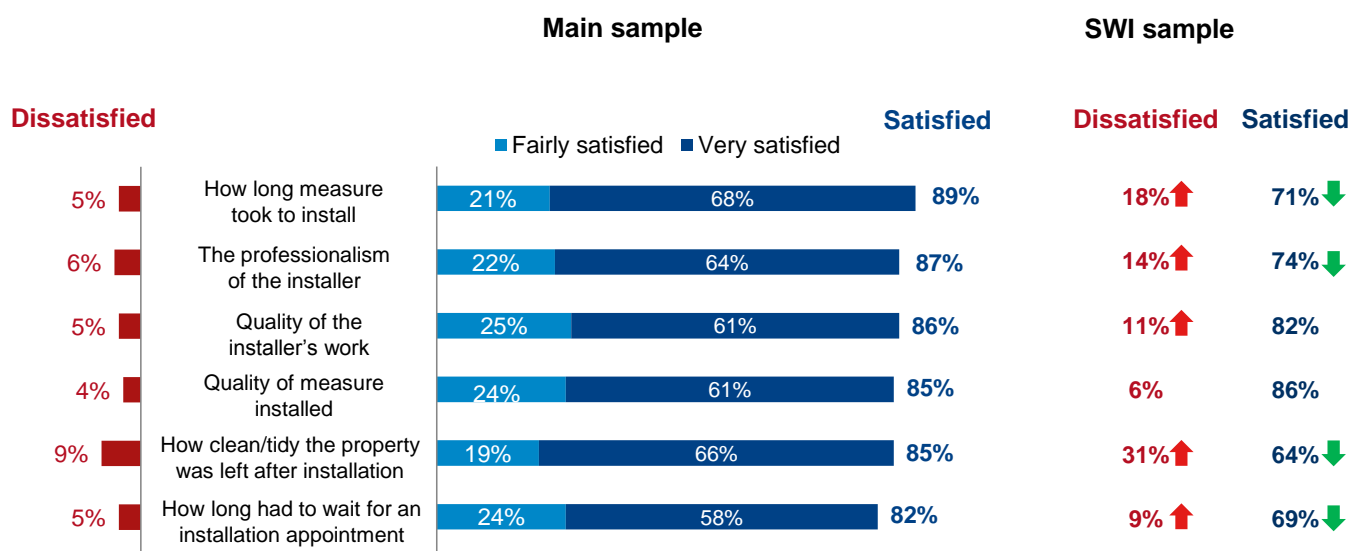
⁶⁷ n=18

⁶⁸ Question H7: To what extent did having [the measure] installed disrupt your day to day activities?

households that had had SWI installed was 39%, which was significantly higher than the proportions for households that had had either boilers (28%) or CWI (15%) installed. This might be a result of the more 'intrusive' nature of SWI installations compared to other types of measure (SWI may take 1-2 weeks to install, and may involve external scaffolding). It is also possible that some issues stemmed from a lack of understanding amongst customers of the installation process (i.e. what they should expect), given the points made earlier about limited pre-installation information provision/ engagement under ECO.

Figure 6.1: Customer satisfaction with installation of measure(s)

Question H6: How satisfied or dissatisfied were you with the things related to the installation of the measure(s)?



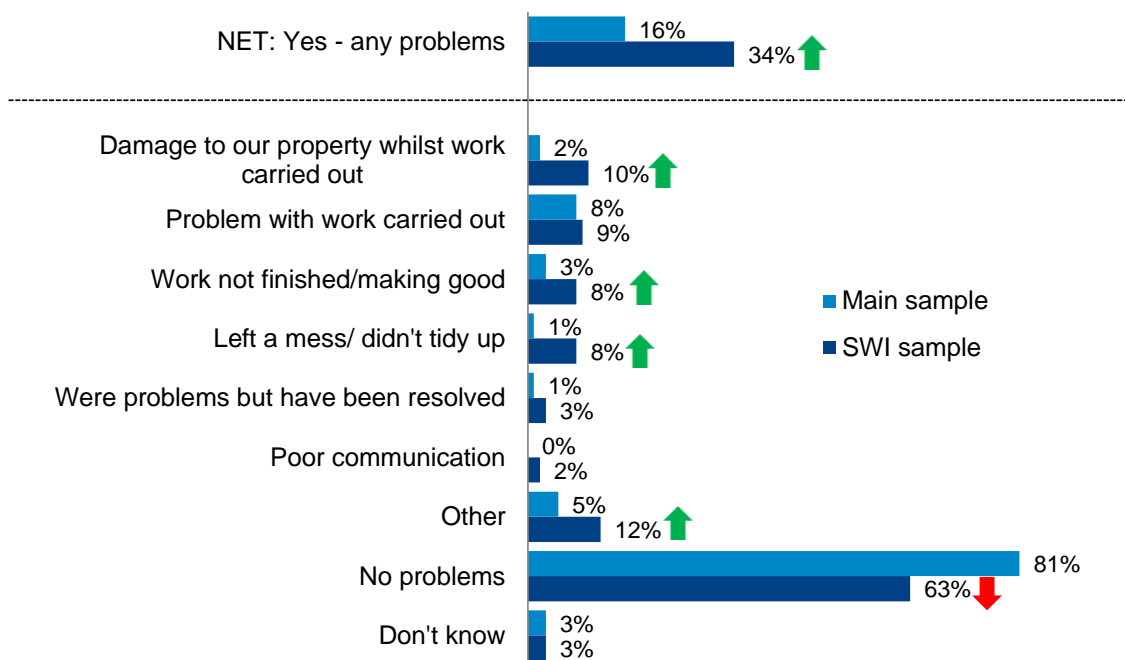
Base: Main sample - all households (468), SWI sample – all households with SWI installed (166); note: proportions of 'neither satisfied nor dissatisfied' have been omitted (these ranged from 2% to 4% amongst all households, and 3% to 9% amongst SWI households), so totals do not add to 100%. ↑↓ denotes significant difference between SWI and main sample

Problems with the installation process

- 6.7. Households were asked whether they had experienced what they regarded as a problem during the installation of their ECO-funded measure(s), and if so what the nature of this problem was (Figure 6.2). The majority (81%) of households reported that they had not experienced any problem with their ECO-funded measure(s) or during the installation of their ECO-funded measure(s). Some 16% of households reported that they had experienced a problem, the most commonly identified issue being a problem with the work carried out (reported by 8% of households).
- 6.8. Households that had had SWI installed were significantly more likely than other households to have experienced any kind of problem with the installation (34% of SWI households had experienced a problem, compared to 16% of all households). Specifically, households that had had SWI installed were significantly more likely than households with other measures installed under ECO to have reported that they experienced: damage to their property whilst work was carried out (10% of SWI households compared to 2% of all households); work not finished (8% of SWI households compared to 3% of all households), and/or that installers left a mess or did not tidy up (8% of SWI households compared to 1% of all households).

Figure 6.2: The proportion of households that had experienced selected problems during their ECO-funded installation

Question H8: have there been any issues or problems with the measure(s) or the installation of the measure(s) that you would like to mention?



Base: Main sample - all households (468), SWI sample – all households with SWI installed (166); note: multiple answers were permitted so does not sum to 100%. ↑↓ denotes significant difference between SWI and main sample

- 6.9. Qualitative interviews included households that had experienced problems with their installation. For example, issues with boiler replacements related to mess in the property after installation, and also post-installation aftercare when problems with use were encountered:

“My previous boiler was working fine even though I had had it for twenty six years and thought it would need to be replaced eventually. After they installed the new boiler [August 2013] the boiler didn't work properly; also the pipes for the boiler were put in the wrong place and looked unsightly. The installer returned a week later to move the pipes, which I am now happy with, but the boiler is still not working and I was left without hot water or heating for around eight weeks.”

Owner Occupier [Flat], 72 years (Affordable Warmth, replacement boiler)

- 6.10. A qualitative interviewee reported problems relating to the installation of SWI, where their experience of the process highlighted the issues in relation to disruption and the condition in which the house was left after installation:

“The next thing I knew they came and put scaffolding up on the house, although the actual work didn't start until ten days later. The job took five days, with one full day of very loud drilling and disruption to the point that I had to go out with the children. I hadn't known to expect this. I also wasn't happy about the amount of rubble and mess left in the garden after it was all finished and I rang the company to complain about this. They came back the next day and cleared up.”

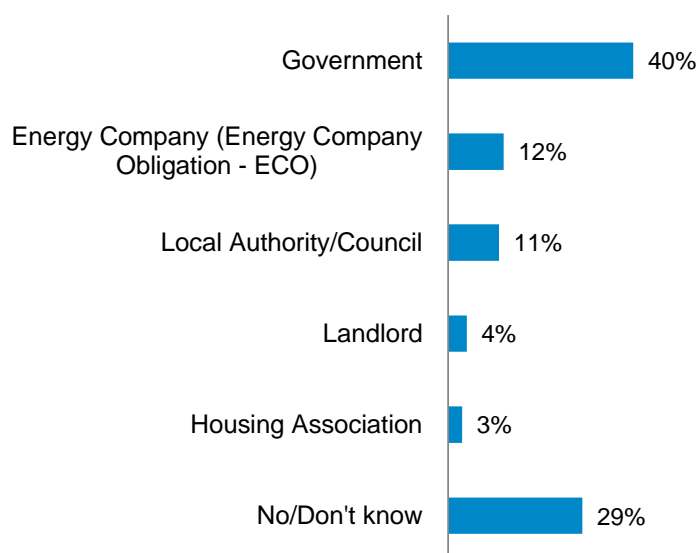
Owner Occupier, 37 years (CERO, SWI)

Customer awareness of the ECO programme

- 6.11. There is no requirement for the organisations that approach households about ECO installations to explain to households that energy efficiency measures are being funded and installed via the 'ECO' programme. Quantitative research with households found that awareness that measures had been paid for via 'ECO' (as a brand) was low (see Figure 6.3). Just under a third (29%) of households did not know who had funded/ part-funded their energy efficiency installation. Some 40% of households attributed their installation to the 'government'.
- 6.12. Some 12% of households explicitly identified energy companies and/or 'ECO' as the source that had financed their energy efficiency installation(s).

Figure 6.3: Who households thought had funded or part-funded the installation of their energy efficiency measure(s)

Question H4: Do you know who paid for the rest of the cost for the measure(s) to be installed?



Base: All households (468)

- 6.13. In qualitative interviews, most ECO customers understood their measure(s) to have been provided through a 'government scheme', usually on the basis of information provided to them when they had first engaged with the ECO programme:

"The guy had a badge when he came to the door and he explained that there was a government initiative to save heat and energy and how the government have put money aside for different properties and that's why we got the work done for free".

Owner Occupier, 45+ years (CERO, loft insulation and CWI)

7. Households' post-installation experiences



This chapter explores customers' experiences after their ECO-funded installation was completed. It looks at whether households received any follow-up contact from installers, and whether they had noticed any benefits from having measures installed.

Note on findings

- 7.1. It should be noted that the population for this study consisted of households that had had ECO measures installed in September 2013. The quantitative and qualitative research was undertaken in November and December 2013, meaning that just a few months had elapsed between installation and fieldwork. It is therefore acknowledged that this was early to be asking about post-installation experiences, particularly the impacts of installations.

Key messages

- The amount and type of post-installation follow-up that households had experienced varied. Follow-ups could involve checking that households were satisfied with their installation, and could also involve the provision of advice as to how best to use installations (e.g. heating controls). Around half of households had had some kind of follow-up (45%), and around half had not (47%)⁶⁹. A follow-up typically involved 'remote' contact by phone (17% of all households) or by a letter (12% of all households), or a post-installation visit/ inspection (21% of all households). A post-installation visit/ inspection was more common where SWI had been installed, with 46% of SWI households reporting a visit/ inspection, compared to 21% of all households.
- Most (72%) households that had had energy efficiency measures installed under ECO reported that they had already noticed the benefit(s), even though the research was carried out prior to the onset of the main winter heating season. Note though that these are self-reported benefits rather than independently measured impacts. Households reported that their home was warmer (69% of households) and, to a lesser extent, that their energy bills were lower (18% of households, though note that this was not verified). There was evidence that the type of measure installed affected reported benefits, with households that had

⁶⁹ The remaining households responded 'don't know' when asked if they had had follow-up

had boilers installed more likely to have noticed the benefit than households with CWI installed (where households often believed that it was too early to tell).

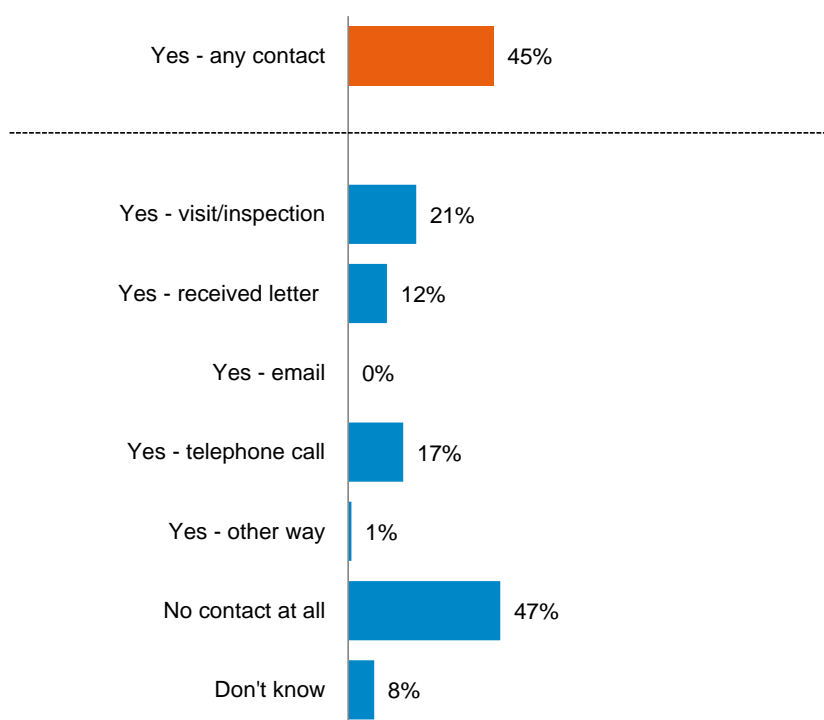
- The majority (84%) of households had recommended or intended to recommend both their specific measure and energy efficiency measures more generally to friends and family. Even where households had not yet experienced any benefits to their installation, the majority of them still indicated that they would recommend the measure to their friends and family.

Installation follow-up

- 7.2. Follow-up is a key part of an installation since it provides an opportunity to assess whether consumers are satisfied with the quality of the work, and for certain measures it also presents a further opportunity for installers to demonstrate to households how they should use their new equipment (e.g. a new boiler). Evidence from the household survey suggests mixed practice in following up ECO installations (Figure 7.1).
- 7.3. Just under half (47%) of households reported that they had not received any kind of post-installation follow-up, and 45% of households reported that they had received some form of contact⁷⁰. A visit or inspection was the most common format of post-installation contact (21% of all households), whilst some households had received a letter or telephone call.

Figure 7.1: Post-installation follow-up reported by households

Question H9: Since the ECO measure was installed, has anyone been in touch in any of these ways to check the quality of the installation or whether you are happy with the work done?



Base: All households (468)

- 7.4. Households that had SWI installed were more likely to have experienced a post-installation visit/ inspection (46% of SWI households had experienced a visit/ inspection once the work was complete, compared to 22% of households with a boiler installed and 15% of households that had had CWI installed). 'Remote' follow-up was more likely amongst households that had boilers installed (41% of households with a boiler installation were contacted via letter or telephone call after the installation was completed).

⁷⁰ The remaining households responded 'don't know' when asked if they had had follow-up

7.5. Households that had CWI installed were less likely to have received any kind of follow-up (60% of CWI households reported that they had not received any follow-up compared to 39% of households with boilers installed and 36% of SWI households).

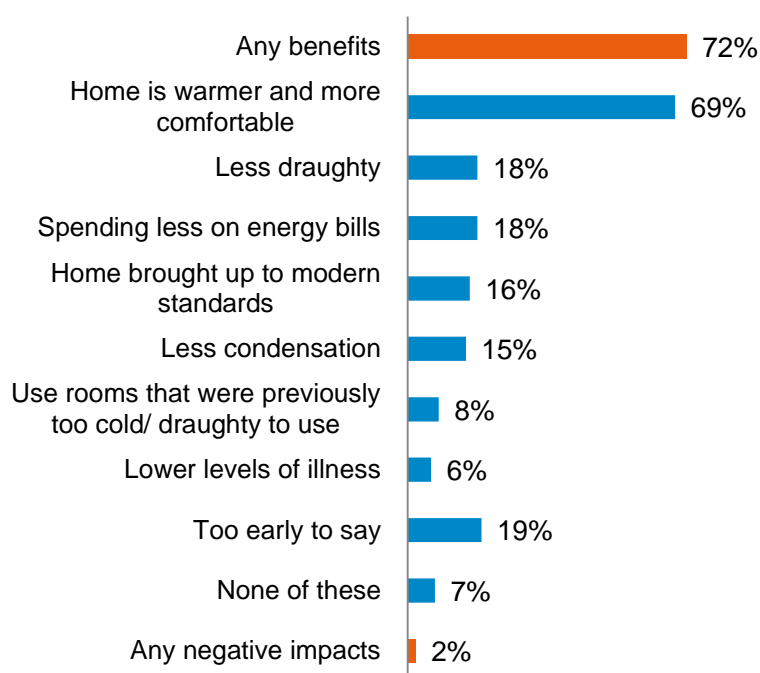
The benefits of ECO-funded installations

7.6. Households were asked to report the benefits that they had experienced as a result of the measures that had been installed under the ECO programme (Figure 7.2). Note though that these are self-reported benefits rather than independently measured impacts. The data showed that the majority of households (72%) had noticed a positive change as a result of their ECO-funded installation. Where this was not the case, customers typically reported that it was ‘too early to tell’ what the benefits would be (19% of households).

7.7. A warmer home was by far the most commonly identified benefit of ECO-funded installations (noticed by 69% of households). Some 18% of households had noticed that they were spending less on energy bills, though it should be noted that this was not verified⁷¹, and that the survey was undertaken in November and early December, and was thus prior to the winter heating season.

Figure 7.2: Post-installation benefits reported by households

Question J2: Which, if any, of these things have you noticed as a result of the energy saving home improvements which have been made?



Base: All households (468)

7.8. Some 2% of households reported that they had experienced negative impacts as a result of the installation of ECO-funded measures. Examples of these negative impacts that were provided by survey respondents included: that their house (or areas of their house) seemed to be colder than was the case prior to the installation, and/or that they were using greater amounts of energy than had been the case prior to installation (all of

⁷¹ The survey also did not test whether other factors had contributed to a lower energy bill, in addition to the installation of measures under ECO

these examples were from houses that had had SWI installed). A household that had had a new boiler installed reported that condensation in their kitchen had increased. As noted previously, these are all self-reported negative impacts, and were not verified as part of the research.

- 7.9. Households that had a boiler (and potentially heating controls) installed were more likely to have noticed benefits than households that had CWI installed. Some 79% of households that had had boilers installed reported that they had noticed benefits, compared to 62% of households that had CWI installed. The latter were more likely to report that it was too early to tell whether there were any benefits (29% of households). Households that had SWI installed were more likely to have noticed that their house was less draughty (35%) and had less condensation (23%).
- 7.10. Survey results were analysed in order to establish whether there was any relationship between installation follow-up and the benefits reported by households. The data indicate that households that reported⁷² that they had benefited a 'great' or 'fair' amount from their installation⁷³ were more likely to have had some form of follow-up than those households that reported that it was too early to say what the benefits would be⁷⁴ (49% of households that had benefited a great/fair amount had had a follow-up, compared to 31% of households that felt it was too early to tell). Note, however, that both installation follow-up and the likelihood of having experienced benefits from installation were closely associated with the measure that was installed, and thus that it is not possible to infer any causal relationship between follow-up and the experience of benefits from an installation.
- 7.11. Qualitative interviews with ECO customers highlighted the impact that ECO measures had on the warmth of their houses, and the efficiency with which they were able to heat their homes. As one interviewee noted:
- "I have noticed it's made a difference to the amount of heat... my boiler is not turned up as high as it would have been this time last year so I think it's improvement"*
- Owner Occupier, 83 years (CSCO, CWI)
- 7.12. The qualitative interviews also highlighted that customers often felt it was too early to tell what the impact of their ECO-funded installations might be (reflecting that interviews were conducted before or at the early stages of winter):
- "I am waiting for a really cold day to test whether the insulation had made a difference. I do expect to see a decrease in the cost of my bills in the long run and expect that the house will feel warmer more immediately"*
- Owner Occupier, 58 years (CSCO, loft insulation)

⁷² These are the results from Question J1, which asked households to rate the extent to which they felt that they had benefitted from having measures installed, using a scale of: a great deal; a fair amount; not very much; not at all; and don't know/ too early to tell

⁷³ n=326. Note that the base size for 'not very much and not at all' was too small to be used for significance testing (n=36)

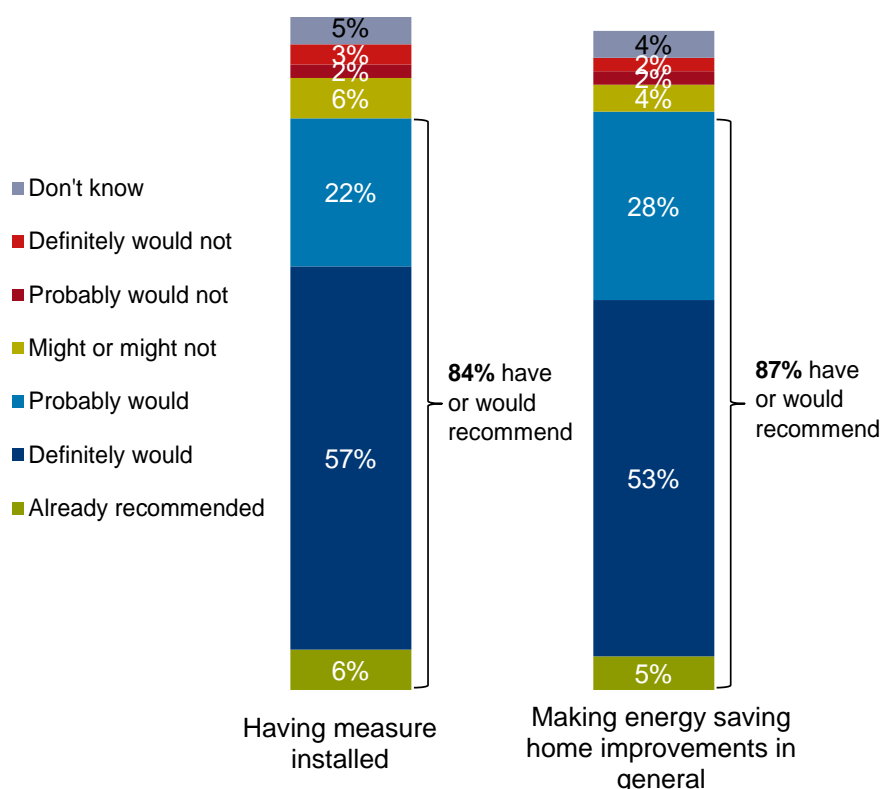
⁷⁴ n=91

Whether households would recommend energy efficiency installations

- 7.13. Households were asked whether, on balance, they would recommend to friends/ family either their specific measure or energy efficiency measures more generally. This provides a further indication of the extent to which households were satisfied with the support that they had received under ECO, and also provides evidence as to whether there might be any kind of 'word of mouth' effect with ECO.
- 7.14. The results are presented in Figure 7.3, and show that few households had *already* recommended specific measures or energy efficiency improvements more generally at the point of survey (6% and 5% of households respectively). Instead, the majority of households intended to make a recommendation in the future, with 79% of households probably/ definitely intending to recommend their specific measure, and 81% of households probably/ definitely intending to recommend energy efficiency measures more generally.

Figure 7.3: Whether customers would recommend ECO measures and/or energy efficiency improvements more generally

Question J3: taking everything into account, to what extent would you recommend these things/ making energy saving home improvements in general to friends and family?



Base: All households (468); Note: proportions do not sum to exactly 100% due to rounding

- 7.15. Households that had noticed benefits from their measures were more likely to recommend *their specific* energy efficiency measure than was the case amongst households that thought it was too early to say⁷⁵. Some 92% of households that had benefited a great/ fair amount from their ECO installation had or definitely/ probably

⁷⁵ As noted previously, the sample size of households that reported that they had not seen very much/ any benefits was too small to enable statistical significance testing

Households' post-installation experiences

would recommend their specific measure, compared to 71% of households that thought it was too early to say whether there had been benefits. There were no statistically significant variations in the likelihood that households would recommend energy efficiency installations depending on the measure that they had had installed (i.e. boilers, CWI, SWI etc.).

- 7.16. Qualitative discussions with ECO customers also highlighted that interviewees would recommend the measure they received due to their positive experiences of installation and early or expected benefits. As one interviewee noted:

“Overall we’re pleased with the work and had a good experience – we’ve already recommended the scheme to a couple of friends and family”

Owner Occupier, 70 years (CSCO, loft insulation)

Behavioural changes in response to ECO

- 7.17. Households were provided with a list of behavioural changes and asked if they had made any of these since having had their ECO-funded measures installed. As noted above, at the point of fieldwork (November and December 2013), only a short period had elapsed since ECO-funded measures were installed (September 2013). It would thus arguably be too soon for some households to have made any significant changes (especially given that fieldwork was completed before the onset of the main winter heating season).
- 7.18. With this in mind, it is perhaps not surprising that 83% of households indicated that they had not made any of the selected behaviour changes⁷⁶. Where changes had been made, 6% of households indicated that they had had a Smart Meter installed, 4% had installed a Home Energy Monitor, and 2% had installed a more energy efficient home appliance (e.g. a fridge or washing machine). Just 1% of households reported that they had installed some other energy efficiency measure and/or switched energy supplier.

⁷⁶ Question J4 Can we just check have you done any of these things since having energy saving improvements installed? Base: All households (468)

8. Conclusions

This final chapter brings together the results of the preceding chapters and sets out the conclusions of ICF International's evaluation team in respect of the research questions set out in Chapter 1

What was the profile of ECO customers from September 2013?

- 8.1. The ECO programme consists of three component obligations, each of which targets particular types of customer or energy efficiency measure. The profile of ECO customers as at the end of 2013 when measures were installed (September 2013) and the survey was carried out (November/ December 2013) varied between obligations:
- In keeping with the target of Affordable Warmth, most (77%) households reported having low incomes (under £16,000 a year), and reported that they had household members in receipt of benefits (90%). Most (75%) Affordable Warmth customers were owner occupiers (a minority – 25% – were private renters).
 - Most (75%) CSCO customers⁷⁷ received loft insulation, with a third receiving CWI (34%). CSCO households were also typically (67%) low income (under £16,000 a year), and just under half (45%) reported that someone in the household was in receipt of benefits. Most (73%) CSCO recipients were owner occupiers, though there were a significant minority of social tenants (19%).
 - CERO⁷⁸ was targeted at the installation of hard-to-treat CWI and SWI (at the time of fieldwork), rather than specific target groups. CERO households were on average slightly wealthier than CSCO or Affordable Warmth households, though around half (51%) of CERO households reported an annual income of under £16,000 a year, and half (50%) of households reported that a household member was in receipt of benefits. Most (79%) CERO customers were owner occupiers.

How did ECO customers find out that they may be eligible for support under ECO?

- 8.2. Householders' engagement with ECO was typically reactive, whereby they were approached by energy companies, or other organisations contracted by energy companies, and informed that they were eligible to have energy efficiency measure(s) installed under ECO. These organisations utilised a wide range of methods to 'target' consumers, with many (41%) households reporting that they had first heard about ECO via door-to-door sales, telephone calls, emails, leaflets, and/or after being approached in the street or in shops. Some (36%) of this sub-group of households⁷⁹ reported that they had been directly approached in this way by multiple different organisations about their ECO eligibility.
- 8.3. Some (13%) households had been informed about ECO by their landlord, local authority or housing association, whilst a further 9% of households had been told about ECO via a friend or family member.

⁷⁷ n=77 (results are thus based on a relatively small base size, and should be treated with caution)

⁷⁸ n=171

⁷⁹ n=179

What were households' motivations for making improvements under ECO?

- 8.4. Households identified several reasons why they had chosen to proceed with an ECO-funded installation. Financial benefits (to save money now and also to protect against any future energy price increases), a desire to have a warmer and more comfortable home, and opportunity (the availability of something for free) were all identified as key factors that had contributed towards customers' willingness to proceed. Some households reported that they had proceeded with an installation because it had been recommended (by friends and family and/or by their energy company). Some 9% of ECO households reported that they had had no choice with their installation, as their landlord, local authority or housing association had said that the work would be done.
- 8.5. Most households (59%) indicated that, before engaging with ECO, they had never considered installing the measure they went on to receive under ECO (9% because they were renting and believed that it was not their choice to make). However, a minority of households (12%) reported that they either had firm plans to do so or were in the process of doing so when they were contacted about ECO.

Did customers pay for improvements under ECO?

- 8.6. Households reported that the vast majority of ECO-funded installations⁸⁰ (97%) had not involved a personal contribution towards the cost of installation. (Note that this finding was based on ECO installations that took place in September 2013). Households that had had SWI installed (note that these and all SWI-themed results were derived from a 'boost' survey of SWI households, whereas other results were derived from the 'main' survey of ECO households) were more likely to have contributed financially, but still only 15% of SWI households⁸¹ had involved a customer contribution to the cost of installation (compared to 3% of all ECO households).

Were customers aware of where ECO funding comes from?

- 8.7. Awareness amongst ECO customers that their measures had been paid for under the 'brand' of the ECO programme was low. For the most part, consumers⁸² either did not know where funding had come from (29% of households), or attributed it to 'the government' (40% of households). Just 12% of households were able to identify that they had received support through 'ECO'. However, it should be noted that the organisations that approach households about ECO are under no obligation to inform customers that measures have been paid for under the ECO programme
- 8.8. Low levels of awareness of the ECO programme may also be influenced by the fact that, for many consumers, the process of arranging an ECO-funded installation (having an assessment, receiving and checking paperwork etc.) was largely 'passive' (if they were involved at all). Assessments/ visits were often focussed on the feasibility of installing specific measures (rather than discussing energy efficiency more generally). Some 67% of customers received written information following an assessment/ visit⁸³, and of this sub-group, a third (32%) of households⁸⁴ reported that they had not read this information. In these circumstances it is perhaps not surprising that consumers' awareness and understanding of the ECO programme was relatively low.

⁸⁰ n=468

⁸¹ n=166

⁸² n=468

⁸³ n=406

⁸⁴ n=226

What were customers' experiences of ECO installations?

- 8.9. Households' reported satisfaction with their ECO installations was high, with 86% of households⁸⁵ indicating that they were satisfied with the quality of the installers' work, and 85% that they were happy with the quality of the installation. Some customers had experienced problems with the measure that had been installed (in some cases it had not been completed), or had post-installation complaints (e.g. a mess left behind), but these were relatively uncommon (just 16% of households reported that they had experienced a problem with their ECO-funded measure(s) or during the installation of their ECO-funded measure(s)⁸⁶).
- 8.10. Households that had received SWI installations under ECO were slightly more likely to have experienced problems as part of the installation process (a third – 34%⁸⁷ – reported that they had had a problem with the installation of their SWI), which might be a result of the more 'intrusive' nature of SWI installations compared to other types of measure (SWI may take 1-2 weeks to install, and may involve external scaffolding). It is also possible that some issues stemmed from a lack of understanding amongst customers of the installation process (i.e. what they should expect), given the points made earlier about limited pre-installation information provision/ engagement under ECO.

What were the perceived impacts of ECO installations?

- 8.11. Primary research with households was carried out in November and December 2013, which was between two and three months after they had had their ECO-funded installation, and was before the onset of the main winter heating season. It was thus arguably too soon for many of the impacts of the installations to have been observed.
- 8.12. Nevertheless, most households claimed to have noticed benefits to having had measures installed. A warmer house was by far the most commonly identified benefit (mentioned by 69% of households⁸⁸), and some households (18%) reported that their energy bills were lower than they had previously been. Households that had had boilers installed⁸⁹ were the most likely to report having experienced benefits (79% reported having experienced any kind of benefit).

Is there any evidence of other changes in ECO customers' behaviour?

- 8.13. The caveat made above about timing (that only two to three months had elapsed since ECO customers' measures were installed) also applies here, and it may take time for behavioural changes to become apparent. When asked about a selection of potential changes, most (83%) households⁹⁰ indicated that they had not altered their behaviour. For example, only small minorities of households indicated that they had had installed any more energy efficient appliances (2%), installed energy efficiency improvements (1%), or switched energy provider (1%).
- 8.14. As noted above, assessments/ visits that were undertaken by organisations as part of the ECO process tended to focus on technical matters, and only a minority of households indicated that they had discussed energy usage and energy efficiency more broadly. The provision of written information was also limited, and in many cases

⁸⁵ n=468

⁸⁶ n=468

⁸⁷ n=166 (all households with SWI installed)

⁸⁸ n=468

⁸⁹ n=204

⁹⁰ n=468

Conclusions

consumers did not read the material that was provided. In this context, it is perhaps not surprising that there was limited evidence of behavioural change.

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