



Department
of Energy &
Climate Change

Green Deal Assessment and Customer Journey follow up surveys

Summary report: July 2015

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The views expressed in this report are those of the authors, not necessarily those of the Department of Energy and Climate Change (nor do they reflect Government policy).

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1. Executive summary

Introduction and objectives

The Green Deal was launched by the Government in Spring 2013 and aims to reduce carbon emissions and improve domestic energy efficiency in Great Britain.

GfK NOP and ICF International were commissioned by DECC to conduct research with samples of households which had had Green Deal Assessments. The research aimed to understand experience of the assessment, and to explore what households have done and plan to do since having the assessment, and how this changes over time. The research included the following:

- Eight waves of 'initial surveys' which were conducted using a mixed mode online/face-to-face self-completion method. The initial surveys were conducted 2-5 months after the original assessment
- Five waves of 'first follow up surveys': respondents from the initial surveys were recontacted by telephone and invited to participate in a telephone survey. The first follow up surveys were conducted 6-10 months after the initial survey; 8-14 months after the original assessment visit
- Two waves of 'second follow up surveys': respondents from the first follow up surveys were recontacted once again by telephone 5-8 months after the first follow up survey; 16-19 months after the original assessment visit

Only some of the initial waves were included in these follow up surveys, because reporting and information needs meant it was not possible to continue following up all of the initial waves.

All data were weighted to the known profile of all households which had received a Green Deal Assessment in the corresponding sampling period, and additional weighting was applied to enable all waves of research to be combined: the latter weight was required to account for the fact that the number of assessments in each sampling period and the number of interviews conducted at each wave differed.

As well as looking at differences by property and household characteristics, this report also comments on differences between households that have received Energy Companies Obligation (ECO) funding and those not receiving ECO funding. Analysis conducted by DECC matched households completing the surveys with information from the Ofgem database of addresses that have had an energy saving measure installed under ECO funding.

First follow up surveys

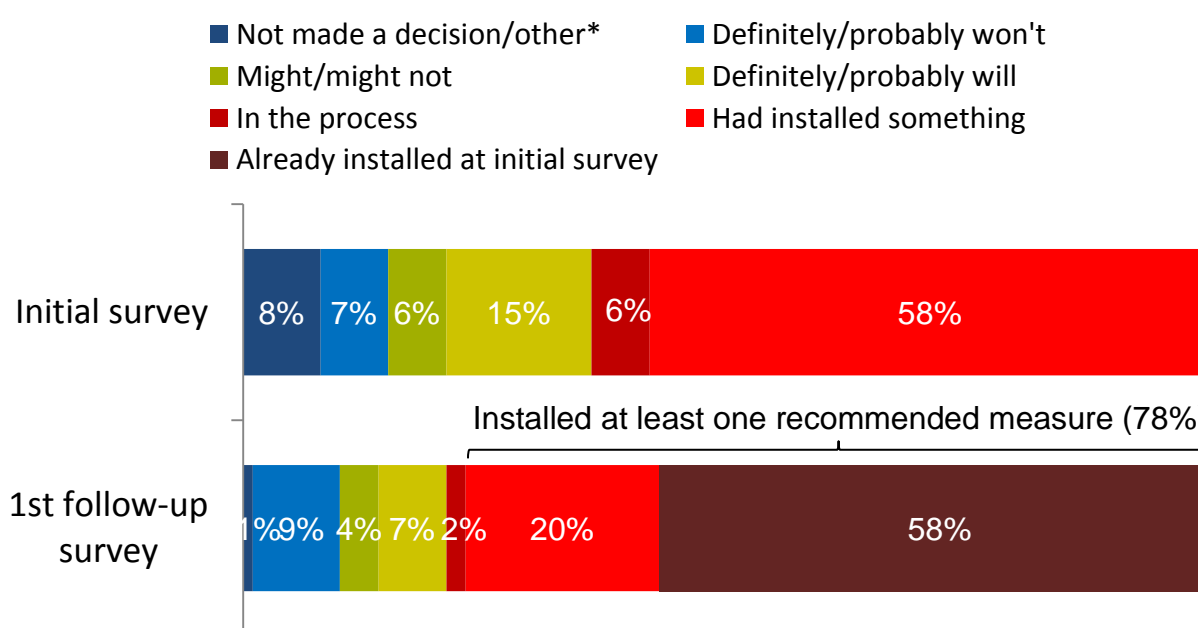
Nearly two thirds of households (62%) had received their Green Deal Advice Report at the time of the first follow up survey: 46% had done so by the time of their initial interview, and a further 18% of households had received their report since. At the first follow up survey, one in ten (10%) households - primarily tenants - said that they were not expecting to receive a report and a further 1% said that it was sent straight to their landlord, though 8% said that they were still expecting to receive a report but had not done so. ECO funded households (56%) were less

likely than non-ECO funded households (76%) to have received a report by the time of the first follow up survey.

At all waves of the research respondents were reminded which measures were recommended in their household's Green Deal Assessment Report, and asked what they had done or intended to do about installing each measure. Similar questions were asked in the initial survey and follow up surveys, to provide a view of whether intentions are translated into actions.

Households were asked about all measures which were recommended for their household, and each household may have installed some measures but not others. To enable an understanding of behaviour within households, the chart below shows the furthest point that all of the 897 households (except those from Wave 1 of the Assessment survey¹) had reached at the time of the initial survey and the first follow up survey².

Chart A: The furthest point in the Green Deal customer journey that respondents had reached



Base: All first follow up survey respondents (except Wave 1 Assessment survey) (897)

* only those who had not received a Green Deal Advice Report were able to give these responses which included: Not made a decision because I've not received my Green Deal Advice Report yet; The assessor did not recommend this; I don't know/can't remember if the assessor recommended this and Don't know.

After the initial survey, 58% of respondents said they had installed at least one measure, and by the time of the first follow up survey a further 20% of households had moved on to install at least one measure. This means that in total, by the time of the first follow up survey, just over three quarters (78%) of households said they had installed at least one measure.

¹ Only those respondents who had received their Green Deal Advice Report (GDAR) were asked about their intentions in the Wave 1 Assessment Survey (covering the assessment period January to March 2013) initial interview, meaning that it is not possible to look at changes in intentions and actions between the initial survey and the first follow up survey amongst all respondents at this wave. Given this - and because certain types of households are more/less likely to receive a GDAR - where intentions and actions are reported, the analysis excludes respondents from the Wave 1 Assessment Survey

² It is possible that consumers were at different stages with two or more measures, and the chart only shows the furthest point along the customer journey that they were at. For example, if a consumer had installed one measure and was in the process of installing another they are only shown once under 'Had something installed'.

While most ECO funded households had installed measures³ (93% had done so by the time of the first follow up), 56% of non-ECO funded households had installed at least one measure by that time (see Table 5). Compared with owner occupiers, there was something of a time lag in installations amongst tenants, and in particular social tenants: while tenants were less likely than owner occupiers to have had measures installed by the time of the initial interview, higher proportions installed measures between the initial interview and first follow up. As a result by the time of the first follow up the proportion of tenants who had installed at least one measure was similar to that of owner occupiers.

At the first follow up survey (excluding Wave 1 of the Assessment survey), 1,018 respondents⁴ had been recommended a total of 2,623 measures, and of these two fifths (42%, 1,106 measures) were reported by respondents as having been installed by the time of the follow up interview. This included 30% (776 measures) which had been installed by the time of the initial interview, and 13% (330 measures) which were installed after the initial survey but before the first follow up interview. In addition, a further 2% of measures (48 measures) were reported to be in the process of being installed, and 9% (246 measures) will be installed (definitely/probably).

Over three quarters of cavity wall insulation (79%) and loft insulation (76%) recommendations led to installation by the time of the first follow up, and around half of recommendations of heating controls (52%), boilers (50%) and solid wall insulation (45%) had been installed.

Installations of loft insulation and cavity wall insulation tended to take place more quickly than those of new boilers and solid wall insulation. Four fifths of loft insulation and cavity wall insulation installations had taken place by the time of the initial interview (2-5 months after the assessment), but this proportion reduced to 60% of new boiler installations and 47% of solid wall insulation installations.

In order to look at changes between intentions and actions on a household basis, comparisons were made between responses made at the initial and follow up interviews in relation to the furthest point reached in the customer journey. All percentages reported on below are based on all respondents (excluding Wave 1 of the Assessment survey) to clearly show changes over time.

Overall, 58% of respondents said they had already installed at least one measure at the time of their initial interview. Most who said that they were in the process of installing at their initial interview had gone to do so (6% said they were in the process at their initial interview, and most - 5% of all respondents - had gone on to install), as had many of those who said they definitely/probably will install (15% of all respondents said they definitely/probably would at their initial interview, and 9% had installed and 1% were in the process – see Table 7).

The links between intentions and actions were less clear when moving further away from installation at the initial interview, but it is still notable that 6% of all respondents said they might/might not, definitely/probably wouldn't or didn't know what they would do at the initial interview, but had gone on to install a measure.

Amongst ECO funded households, all of those who said at the initial interview that they were in the process, definitely/probably would or might/might not have measure installed went on to

³ ECO funded households were identified via, analysis conducted by DECC which matched households completing the surveys with information from the Ofgem database of addresses that have had an energy saving measure installed under ECO. Therefore, by definition, almost all households identified as ECO funded would be expected to have installed an energy saving measure. Please refer to the 'Interpretation of findings' section in Chapter 2 for further information.

⁴ Weighted base shown (unweighted base equals 897)

have a measure installed. Amongst all non-ECO funded households, a lower proportion had actioned their intentions by the time of the first follow up: for example 23% said they definitely/probably would install a measure at the initial interview, but only 19% had done so by the time of the first follow up (see Table 5).

When comparing intentions and actions on individual measures, cavity wall insulation and loft insulation were most likely to be installed by the time of the follow up interview. Solid wall insulation, floor insulation and solar measures (solar photovoltaic, solar thermal) were the most likely measures to be associated with lower intentions at the follow up interview compared with the initial interview.

The main reasons given by households which had not moved any further towards the process of installing a recommended core measure⁵ related to cost (mentioned by 31% of those who had not moved on), the need to carry out other work (21%) and the fact that they were still making a decision (20%)⁶. This indicates that the route to installation can be a long term process. Women, owner-occupiers and people in non-ECO funded households were particularly likely to not move on or backwards in their journey to installation between the initial and follow up interviews.

The main reasons given by households which had become less likely to install also centred on cost (mentioned by 20% of those who had become less likely), and hassle/disruption (17%), though a similar proportion (17%) said they were waiting for someone to get back to them⁷.

All who had installed a measure (before or since completing the initial interview) were asked how the work was paid for. Responses should be treated with caution, as evidence from the initial surveys suggests that respondents often do not know how installations are funded⁸. The methods of funding mentioned by those who had installed any recommended core measures (excluding Wave 1 of the Assessment survey) were as follows:

- 64% said that the work was paid for by a third party, which included 19% who said that the measure was paid for by the local authority, 17% who said that the work was paid for by an energy company, 7% who said that the work was paid for by a housing association and 6% who said that the work was paid for by a landlord. A further 7% said that the work was free and did not know who paid
- 24% said that the work was self-financed (e.g. from savings, personal loans)
- 8% had used any Green Deal funding (including Green Deal Finance and Green Deal Cashback/Home Improvement Fund), which included 5% who had used Green Deal Cashback/Home Improvement Fund
- 12% did not know how the work was financed

Overall, 58% of households which had installed any measures at all said that these measures were funded by third parties *only*. Measures most commonly installed by households using third party funding only included cavity wall insulation (52%), loft insulation (40%) and solid wall

⁵ Core energy saving improvements include: Loft insulation, cavity wall insulation, solid wall insulation, flat roof insulation, room in roof insulation, floor insulation, new boiler, solar photovoltaic, solar thermal, replacement windows/doors

⁶ Base: All first follow up survey respondents (except Wave 1 Assessment survey) that had not changed intention to install a recommended core measure (73) Caution, low base

⁷ Base: All first follow up survey respondents (except Wave 1 Assessment survey) that had become less likely to install a recommended core measure (94) Caution, low base

⁸ For example, at Wave 2 of the Green Deal Customer Journey Survey (available at: <https://www.gov.uk/government/collections/green-deal-assessments-research>), 21% of households which had installed a core measure said the measure was “free” (that is, it was paid for by a third party but they did not know exactly who).

insulation (17%). Nine per cent of households receiving third party funding for measures also self-funded, and 1% of those receiving third party funding also used Green Deal funding in some way (e.g. Green Deal Finance, Green Deal Cashback/Home Improvement Fund).

Over three quarters (76%) of households which had installed any recommended measure felt that they had benefited a lot/a fair amount from having the measures installed, with households installing solid wall insulation most likely to feel that they had benefited (84%).

The main benefits noticed by households who had installed recommended measures were that their home was warmer/more comfortable (84%), had been brought up to modern standards (81%), was less draughty (64%), and that they were spending less on their energy bills (65%). Social tenants who had had measures installed were more likely to report benefits from the measures installed. In addition, respondents who had had solid wall insulation installed were more likely to report benefits.

Three quarters (76%) of respondents said they had or would recommend the Green Deal process to family and friends: ECO funded households (84%) were more likely than non-ECO funded households (64%) to say they had or would recommend the process.

Second follow up surveys

The second follow up surveys interviewed a subset of households that had taken part in the first follow up surveys for waves 1 and 2 of the Assessment surveys. It should be noted that, because respondents to the second follow up survey is a sub-set of the corresponding first follow up survey, direct comparisons should not be made with the sections above.

By the time of the second follow up survey, 9% of households (20 out of 226) had installed a recommended measure since the first follow up survey: 6% for the first time since their Green Deal Assessment, and 3% in addition to any measures already installed by the time of the first follow up survey. The total proportion of households interviewed at the second follow up survey which had installed measures increased from 66% after the first follow up to 72% after the second follow up.

This means that an additional 27 measures had been installed since the first follow up survey, which included 7 installations of solid wall insulation, 4 installations of heating controls and 3 installations of a new boiler.

Closing remarks

The follow up surveys conducted with households receiving a Green Deal Assessment have been helpful in understanding their longer-term views and actions. For some, in particular social tenants, there was often a time lag between the assessment and installation of measures. Therefore estimates taken from the initial surveys only will have under-estimated the number of measures installed.

In addition, the follow up surveys have been effective in understanding how intentions have been translated into actions. It is positive to see that few of those who start the process of installing do not go on to complete it, and the conversion from engagement to installation amongst ECO funded households, men and tenants is particularly strong.

However, some non-ECO funded households were stalling in their journey to installation and there may be some scope to recontact households which have had an assessment after a time to keep them motivated and discuss what additional support could be helpful to them in moving on to install measures. While cost was stated as the predominant factor stalling households in their customer journey, some had encountered supply side issues and others were waiting for

someone to get back to them. Any actions which encourage a further 'pull' from consumers could be helpful.

However, the fact that a half of ECO funded households and a quarter of non-ECO funded households had not received a Green Deal Advice Report by the time of the first follow up survey may represent a missed opportunity. The Green Deal Assessment process should give a holistic view of energy saving installations and behaviours for that household, and the fact that so many are not receiving their report means that a large number of households are missing out on the personalised information and advice that their report could give⁹.

It is notable that most of those experiencing the Green Deal process said that they would recommend it to family/friends: even half of non-ECO funded households which have not installed any measures still said they would do so. This suggests that the process is positive for many, even if they have not yet taken action as a result, and continued positive word of mouth could be effective in encouraging more households to consider the Green Deal.

While solid wall insulation is the most expensive measure, it is positive to note that those who have had it installed were the most likely to feel the benefits of the installation.

⁹ It should be noted that not all households that receive a GDAR will read it. For example, unpublished findings from waves 1 and 2 of the Customer Journey initial survey showed that around a quarter (29% at Wave 1 and 24% at Wave 2) of those that had received a GDAR had not used or looked at it at all.

2. Introduction

Background and objectives

The Green Deal was launched by the Government in Spring 2013 and aims to reduce carbon emissions and improve domestic energy efficiency in Great Britain. As well as providing opportunities for households to find out how to make their homes more energy efficient through Green Deal Assessments, the Green Deal also offers a new way to pay for energy saving home improvements through electricity bills.

GfK NOP and ICF International were commissioned by DECC to conduct research with samples of households which had had Green Deal Assessments. The research was commissioned in order to find out more about the assessment experience, and to explore what households have done and plan to do since having the assessment. In total eight waves of research were conducted using a mixed mode online/face-to-face self-completion method: three waves of the Green Deal Assessment survey and five waves of the longer Green Deal Customer Journey survey.

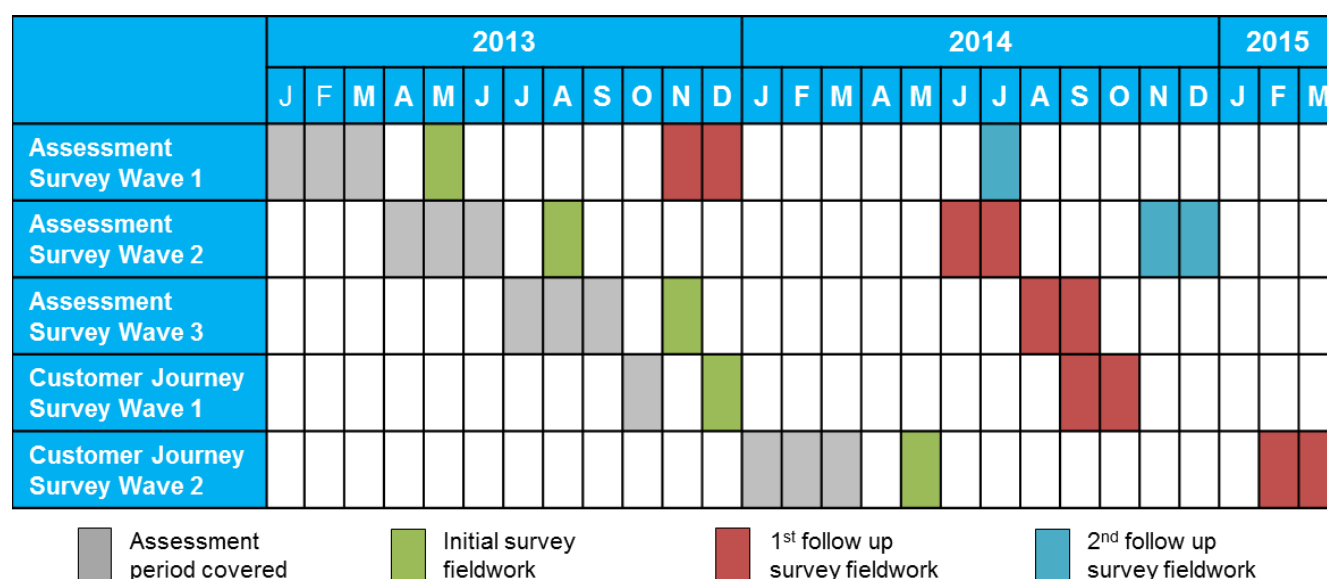
In order to assess whether intentions turn into actions, and broader motivations and experiences, DECC commissioned a number of follow up surveys. Those who completed the initial surveys (and consented to being recontacted) were followed up to twice via telephone:

- The first follow up survey was nine to ten months after respondents had completed the initial survey (with the exception of Wave 1 of the Assessment survey which was conducted six months after the initial survey)
- The second follow up survey was a further five to eight months after the first follow up survey (around 14-15 months after the initial survey)

Only some of the initial waves were included in these follow up surveys, because reporting and information needs meant that it was not possible to continue following up all of the initial waves.

Chart 1 shows the timing of the initial waves, and which initial waves received first and second follow ups.

Chart 1: Timings of the initial and follow up research



It should be noted that Wave 1 of the Customer Journey survey only included households that had a Green Deal Assessment during a single month (October 2013) whereas all other waves of the Assessment and Customer Journey research covered a 3-month Green Deal assessment period.

Summary findings for each initial survey have already been published. They can be found at <https://www.gov.uk/government/collections/green-deal-assessments-research>

This report summarises the key findings from the follow up surveys as well as providing a synthesis of findings from across the initial and follow up surveys.

Methodology and sampling

For full details of all methodologies, sampling and weighting, please refer to the technical note at the end of this report.

Initial surveys

For each initial wave of research GfK NOP drew a random sample of 900 or 1800 addresses (depending on wave) which had had a Green Deal Assessment in the time periods shown in Chart 1 above. Sampled households were sent a letter inviting them to complete an online survey; those that did not complete the online survey were then contacted by face-to-face interviewers. The interviewer gave the householder their laptop to complete the survey; therefore the online and face-to-face elements were both self-completion (reducing the impact of mode effects).

At each wave, data were weighted to the known profile of all households which received a Green Deal Assessment in the corresponding sampling period.

Follow up surveys

The follow up surveys interviewed those who took part in the initial surveys and consented to being recontacted (and provided a valid telephone number for this purpose). All waves were conducted by telephone interviewers with first follow up interviews lasting 12 minutes on average and second follow up interviews lasting an average of 10 minutes. The surveys made use of the responses given at the earlier survey(s) in order to follow up previously stated intentions.

As with the initial surveys, data for both the first and second follow up surveys were weighted to the known profile of all households which received a Green Deal Assessment in the corresponding sampling period. This also corrected for profile differences between the first and second follow up surveys which were associated with a loss of sample (as not all those interviewed in the first follow up also completed the second follow up survey).

Chapter 6 ('Technical notes') includes details of the number of follow up interviews conducted at each wave. The technical report provides further information including response rates for each wave of the follow up surveys and the profiles of those interviewed.

Additional weighting used in this report

This report combines data from several waves of research to enable findings from the follow up waves to be reported as a whole, as opposed to reporting differences between waves (i.e. across time). Therefore a different weighting scheme was required to enable the combination of a number of waves, given that the number of assessments in the corresponding time period and the number of interviews conducted at each wave both differed.

An additional weight was therefore calculated which weights each wave by the volume of assessments conducted within the corresponding assessment period covered (indicated for each wave in Chart 1 by the grey shading), ensuring that the total sample is representative of the overall assessments period covered¹⁰.

Results included in this report are based on weighted data. Weighted and unweighted profiles of households interviewed for the follow up surveys are included in the technical report.

Interpretation of findings

In reading this report, the following should be noted:

- Only those respondents who had received their Green Deal Advice Report (GDAR) were asked about their intentions in the Wave 1 Assessment Survey (covering the assessment period January to March 2013) initial interview, meaning that it is not possible to look at changes in intentions and actions between the initial survey and the first follow up survey amongst all respondents at this wave. Given this - and because certain types of households are more/less likely to receive a GDAR - where intentions and actions are reported, the analysis excludes respondents from the Wave 1 Assessment Survey. It is highlighted throughout this report where this is the case.
- Direct comparisons of the findings in this report with previously published reports (including the initial survey summary reports) should be avoided, given that data in this report has been reweighted to allow reporting across all waves.
- Furthermore, findings in this report relate to follow up surveys of an initial sample (with not all respondents taking part in the follow up survey). This means that comparisons with data shown in other published reports from the Green Deal Assessment surveys or Customer Journey surveys would not be valid.

This report comments on differences between households that have received Energy Companies Obligation (ECO) funding and those not receiving ECO funding. Analysis

¹⁰ For example, for the first follow up survey, the additional weighting meant that respondents from the Wave 1 Assessment Survey were down-weighted to account for the volume of assessments conducted in January-March 2013 (the assessment period covered by this wave) as a proportion of the volume of assessments conducted in January-October 2013 and January-March 2014 (the overall assessments period covered). Please refer to the technical report for full details.

conducted by DECC matched households completing the surveys with information from the Ofgem database of addresses that have had an energy saving measure installed under ECO¹¹.

The following limitations in matching this information to the survey data should be noted:

- Data matching to survey records was only conducted where respondents gave permission to do so. This means that the analysis of whether a household received ECO funding is not based on the full sample of interviewed households.
 - Three quarters of respondents to the first follow up surveys gave permission for data matching to take place. Some groups were less likely to give this permission, and this may introduce some bias into analysis using ECO matched data. Less likely to give permission were:
 - Under 45s (70%, compared with 78% of 45-64s and 76% of 65+s)
 - Those in households which were *not* receiving means tested benefits (71%, compared with 79% in households receiving means tested benefits)
- There can be a time lag in a measure installed under ECO funding being registered on the Ofgem ECO installation database. Therefore, a household may have had ECO funded measures installed but may not have been flagged as such in the database and subsequent matching exercise because of this time lag.
- It is also possible that the ECO funded installation was conducted as a separate episode (i.e. not related to the Green Deal Assessment or related to a measure not recommended as part of the assessment).
- Furthermore, delays to the installation of an ECO funded measure may mean that some measures were installed after households were interviewed.

Therefore when looking at ECO funded households in this report, the number reporting having installed at least one measure recommended to them by their GDAR may not equal 100%.

Reporting conventions

Throughout the 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 the result of an actual change, rather than something related to sampling or methodology. This report uses the following conventions:

- All differences commented upon are statistically significant at the 95% confidence level.
- Significant differences between sub-groups are indicated by the arrows (↑↓) within charts.
- A finding of less than 0.5% but greater than zero is indicated by an asterisk (*) in tables.
- All base sizes quoted in the report are unweighted.

Sample profiles

Table 2 below shows the weighted sample profiles for the first and second follow up surveys to help the reader understand the findings discussed throughout this report. The profiles are shown at total level, whilst the profile of the first follow up surveys is also shown by whether a household was flagged as ECO funded or non-ECO funded (this is not shown for the second follow up survey due to small base sizes).

¹¹ Information from the Ofgem database was initially matched to Green Deal Assessment records by DECC in March 2015 and subsequently applied to survey records (where permission was given by respondents)

It should be noted the analysis of whether a household received ECO funding is not based on the full sample of interviewed households given that data matching to survey records was only conducted where respondents gave permission to do so. Of the households that gave permission for data matching to take place¹², 59% were identified as ECO funded households and 41% as non-ECO funded.

Table 2: Weighted profiles of households included in the first and second follow up surveys

	FIRST FOLLOW UP SURVEYS			SECOND FOLLOW UP SURVEYS
	TOTAL	ECO funded households	Non-ECO funded households	TOTAL
	(%) 1,087	(%) 496	(%) 324	(%) 226
Region				
North	27	39	16	29
Midlands (inc. Wales)	29	27	28	30
South	30	24	39	42
Scotland ¹³	14	10	17	-
Urbanity¹⁴				
Urban	61	67	54	58
Suburban/Rural	39	33	46	42
Tenure				
Owner occupiers	74	71	79	78
Social tenants	19	21	16	16
Private tenants	7	8	5	7
Property Type				
Flats	15	16	12	13

¹² Base: All households that gave permission for data matching (820)

¹³ Households in Scotland were not included in Waves 1 and 2 of the Assessments research due a data agreement not being in place at the time of the research. Therefore households in Scotland were only included in the research from Wave 3 of the Assessment survey onwards.

¹⁴ The urbanity identifier is broken down into three groups; Urban, Suburban and Rural. Urban areas are defined as those in which the population density is greater than 7 persons per hectare, 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.

	FIRST FOLLOW UP SURVEYS			SECOND FOLLOW UP SURVEYS
	TOTAL	ECO funded households	Non-ECO funded households	TOTAL
	(%) 1,087	(%) 496	(%) 324	(%) 226
Non Flats	85	84	88	87
Energy Band¹⁵				
A-D	70	71	69	65
E-G	30	29	31	35
Household in receipt of means tested benefits				
Yes	54	59	50	56
No	46	41	50	44

¹⁵ Energy band information is based on Green Deal Assessment data and therefore does not account for any installations made post-assessment

3. First follow up surveys

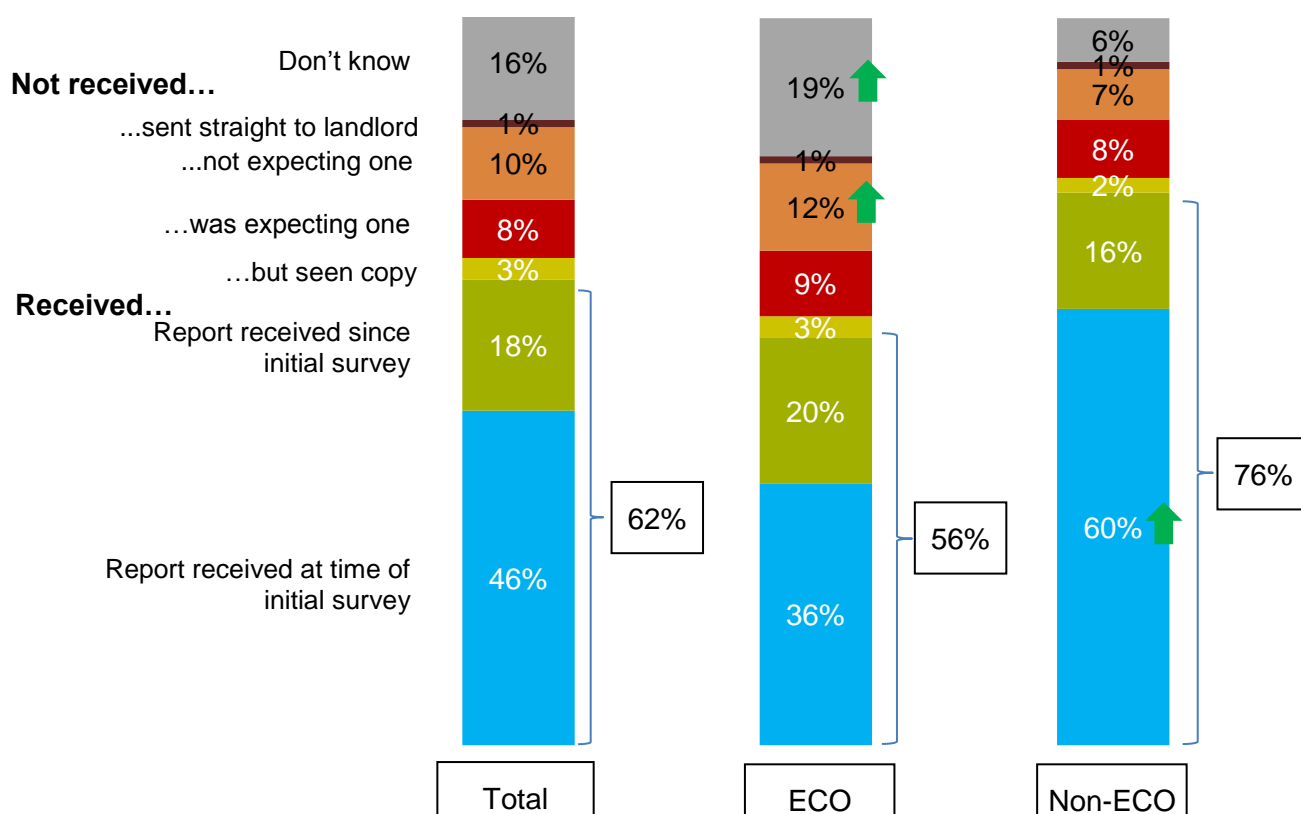
Receipt of Green Deal Advice Report

Not all respondents interviewed in the initial survey had received their Green Deal Advice Report (GDAR) at the time of interview. In the follow up interview, a question was asked to check whether the report had been received since (Chart 3).

Just under half (46%) of households had received their report at the time of the initial survey, and a further 18% had received their report since. In total, therefore, 62% of households had received their report at the time of the first follow up survey.

Therefore, 22% of households said that they had not received their report by the time of the first follow up survey: 3% said they had seen a copy of the report (e.g. on screen during the assessment visit), 10% were not expecting to receive a report, and a further 1% said that the report was sent straight to their landlord. However, around one in ten (8%) of households said they were still expecting to receive a Green Deal Advice Report but had not done so at the time of the first follow up survey. A further 16% did not know if they had received their report.

Chart 3: Whether received a Green Deal Advice Report (GDAR)



Base: All first follow up survey respondents (1,087); ECO households (496); Non-ECO households (324)

Significant differences between ECO and non-ECO funded households are indicated by arrows (↑)

Owner occupiers were significantly more likely than tenants to have received their report (70% of owner occupiers had received their report, compared with 47% of tenants¹⁶). However, this difference was primarily driven by social tenants, who were particularly unlikely to have received their report (39% of social tenants had received it, compared with 65% of private tenants¹⁷).

While most owner occupiers who received their report had received it by the time of the initial survey (2-5 months after the assessment visit), the time lag for tenants was greater:

- 78% of owner occupiers¹⁸ who had received their report had done so by the time of the initial survey, with only 22% receiving their report later¹⁹
- 49% of tenants who had received their report²⁰ had done so by the time of the initial survey, but 51% received their report later

Given the links between tenure and ECO, it is unsurprising to note similar patterns amongst ECO funded households. Three quarters (76%) of non-ECO funded households, who were more likely to be owner occupiers²¹, had received their Green Deal Advice report, compared with 56% of ECO funded households. Similar patterns were observed in relation to the time lag for receiving the report, with ECO funded households who had received their report tending to receive it later than non-ECO funded households (Chart 3).

Intentions and actions

At the initial Wave 1 Assessment survey, only those households who had received their Green Deal Advice Report were asked about their post-assessment intentions and actions. In later initial surveys, all households were asked about intentions and actions to improve questionnaire coverage. Because of this change in questionnaire routing, it is not possible to directly combine responses to affected questions from the Wave 1 Assessment survey follow up survey with later waves. This section of the report therefore excludes respondents from the Wave 1 Assessment first follow up survey.

All respondents were reminded which measures were recommended in their household's Green Deal Assessment Report, and were asked what they had done or intended to do about installing each measure, on a scale ranging from 'have had this done' to 'definitely won't do this'²².

Chart 4 shows the *furthest point* that **all** of the 897 households (except those from the Wave 1 Assessment survey) interviewed in the first follow up surveys had reached at the time of the initial survey and at the first follow up survey²³.

¹⁶ Base: All owner occupiers (800); All tenants (287)

¹⁷ Base: All social tenants (212); All private tenants (75) *Caution, low base*

¹⁸ Base: All owner occupiers who had received their Green Deal Advice report (563)

¹⁹ The first follow up surveys were conducted 8-14 months after the assessment visit. Whilst it is therefore known whether or not a respondent had received their report at the time of the initial survey or at the time of the first survey, the surveys did not collect information about which month specifically (or how many months after the assessment) the report was received

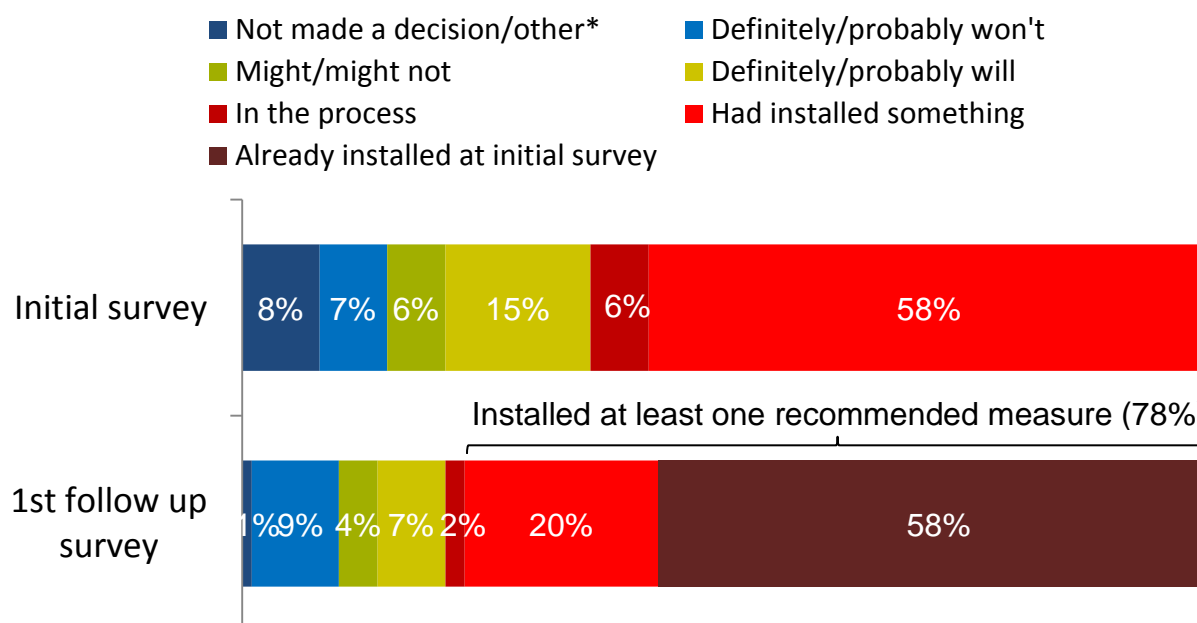
²⁰ Base: All tenants who had received their Green Deal Advice report (127)

²¹ Owner occupiers comprised 79% of non-ECO funded households, compared with 71% of ECO funded households. See the 'Sample profiles' section in Chapter 2.

²² Households that had not received their GDAR at the time of the initial and follow up interviews were also able to give the following additional responses: Not made a decision because I've not received my Green Deal Advice Report yet; The assessor did not recommend this; I don't know/can't remember if the assessor recommended this; and Don't know.

After the initial survey, 58% of respondents said they had installed at least one, and by the time of the first follow up survey a further 20% had moved on to install at least one measure. This means that in total, just over three quarters (78%) of households interviewed said they had installed at least one measure by the time of the first follow up survey.

Chart 4: The furthest point in the Green Deal customer journey that respondents had reached



Base: All first follow up survey respondents (except Wave 1 Assessment survey) (897)

* only those who had not received a Green Deal Advice Report were able to give these responses which included: Not made a decision because I've not received my Green Deal Advice Report yet; The assessor did not recommend this; I don't know/can't remember if the assessor recommended this and Don't know.

At both the initial and follow up surveys, ECO funded households were more likely non-ECO funded households to say they had installed at least one measure (Table 5).

²³ It is possible that consumers were at different stages with two or more measures, and the chart only shows the furthest point along the customer journey that they were at. For example, if a consumer had installed one measure and was in the process of installing another they are only shown once under 'Had something installed'.

Table 5: The furthest point in the Green Deal customer journey that respondents had reached by Tenure and whether ECO funded

	Tenure			Whether ECO funded	
	All respondents (897) %	Owner-occupier (659) %	Tenant (238) %	ECO funded (434) %	Non-ECO funded (257) %
Initial Survey					
Have had this done	58%	61%	50%	74%	37%
In the process of doing this	6%	6%	4%	4%	7%
Definitely/probably will do this	15%	13%	19%	9%	23%
Might or might not do this	6%	6%	6%	3%	12%
Definitely/Probably won't do this	7%	8%	5%	4%	10%
Not made a decision/not recommended/DK	8%	5%	17%	6%	12%
First follow up survey					
Installed at initial survey	58%	61%	50%	74%	37%
Have had this done (since initial survey)	20%	18%	25%	19%	19%
In the process of doing this	2%	2%	1%	1%	4%
Definitely/probably will do this	7%	9%	2%	2%	16%
Might or might not do this	4%	2%	8%	1%	8%
Definitely/Probably won't do this	9%	8%	11%	2%	16%
Not made a decision/not recommended/DK	1%	*	2%	1%	-

Base: All first follow up survey respondents (except Wave 1 Assessment survey) (bases shown on table).

There were some differences in response by tenure related to the timing of installation:

- Owner occupiers (61%) were the most likely to have installed a measure by the time of the initial interview, followed by 55% of private tenants and 49% of social tenants²⁴
- Social tenants were the most likely to have installed measures between the initial interview and first follow up (28%), followed by 18% of both private tenants and owner occupiers.

This means that, while there was more of a time lag between the assessment and installing measures amongst social tenants, the proportion of social tenants (77%) who went on to have at least one measure installed was similar to owner occupiers (79%) and slightly (although not significantly) greater than private tenants (73%).

It is also notable that there were no similar patterns based on whether households had received ECO funding: ECO funded households were more likely than non-ECO funded households to have had measures installed by the time of the first interview, but both groups were equally likely to install measures between the initial and first follow up interviews (19% of both groups).

There were few other sub-group differences in responses, though it is notable that households in the North of England were more likely than those in other regions to have installed measures at the time of the initial survey (74%, compared with 58% on average), and by the first follow up (in total 90% of households in the North had at least one measure installed by the time of the first follow up, compared with 78% on average)²⁵.

Looking at this on the basis of measures, the 1,018 respondents²⁶ to the first follow up survey (excluding the Wave 1 Assessment survey) had been recommended a total of 2,623 measures²⁷.

Of the 2,623 measures recommended, two fifths (42%, 1,106 measures) were reported by respondents as having been installed at the time of the follow up interview, with a further 2% of measures (48 measures) in the process of being installed²⁸. Table 6 summarises the stages of installation/intentions for all recommended measures.

Over three quarters of cavity wall insulation (79%) and loft insulation (76%) recommendations led to installation by the time of the first follow up, and around half of recommendations of heating controls (52%), boilers (50%) and solid wall insulation (45%).

Recommendations for solar thermal, solar photovoltaic and floor insulation were least likely to lead to installation – seven in ten or more of those recommended each of these measures said they probably or definitely would not install them.

²⁴ Base: All owner occupiers (except Wave 1 Assessment survey) (659); All social tenants (except Wave 1 Assessment survey) (175); All private tenants (except Wave 1 Assessment survey) (63) *Caution, low base*

²⁵ It is likely that these regional differences are related to the receipt of ECO funding (given that ECO funded households were more likely than non-ECO funded households to have installed at least one measure) where 39% of ECO funded households were located in the North, compared with 27% of households located in the North on average.

²⁶ Weighted base shown (unweighted base equals 897)

²⁷ Information on recommended measures was taken from the Landmark Database, where Green Deal Advice Reports are lodged.

²⁸ Once again, it should be noted that these results should be treated as indicative.

Table 6: Follow up survey Post assessment actions and intentions

Measure (brackets show the weighted number of respondents recommended each)	Stage of post assessment journey and intention to install by % of recommended measures					
	Had this installed	In the process of being installed	Definitely/prob ably will install	Might or not install	Probably/defin itely won't install	Not made decision/not recommended/ don't know
All measures (2623) number	1106	48	246	173	978	72
All measures (2623) %	42%	2%	9%	7%	37%	3%
Cavity wall insulation (398)	79%	1%	6%	5%	9%	*
Loft insulation (344)	76%	-	8%	4%	9%	3%
Floor insulation (295)	6%	1%	9%	5%	73%	6%
New boiler (287)	50%	1%	15%	9%	24%	2%
Solid wall insulation (285)	45%	5%	7%	4%	36%	2%
Heating controls (203)	52%	3%	12%	6%	26%	2%
Solar photovoltaic (273)	10%	-	7%	10%	70%	3%
Solar thermal (197)	3%	*	4%	11%	79%	3%
Double/triple/secondary glazing/ replacement doors (105)	21%	6%	24%	15%	33%	1%
Other measures* (236)	36%	5%	13%	5%	38%	4%

Base: All measures recommended to first follow up survey respondents (except Wave 1 Assessment survey) (bases shown on table). 'Other measures' have been combined because of low base sizes

* Other measures includes: Draught proofing (99); Hot water cylinder insulation (66); Flat roof/room in roof insulation (37); Other heating upgrade (19); Ground Source Heat Pump, Air Source Heat Pump, Wind turbine (roof mounted) and Waste water heat recovery (15).

Looking also at the timing of installations, there are clear differences based on measure: most of the installations of loft insulation and cavity wall insulation had taken place by the time of the initial interview (2 to 5 months after the assessment), whilst around half all solid wall insulation installations had taken place since the initial interview²⁹:

²⁹ Base sizes are too small to look at this for other measures, and small base sizes mean that it is not possible to look at responses broken down by demographic groups in any further detail

- 84% of loft insulation installations³⁰ took place by the time of the initial interview
- 80% of cavity wall insulation installations³¹ took place by the time of the initial interview
- 69% of new boiler installations³² took place by the time of the initial interview
- 47% of solid wall insulation installations³³ took place by the time of the initial interview)

Changes in intentions and actions

As discussed earlier (Chart 4/Table 5) there was an increase of 19 percentage points in the proportion of households who had had at least one measure installed between the initial interview and the first follow up survey. It is worth noting that customers could be staging the installation of several measures. Ten percent of those who had had a measure installed in the initial survey had had at least one further measure installed by the time of the first follow up interview.

In addition to the increase in the proportion of households saying they have installed measures, there were reductions in the proportions saying they were in the process of installing a measure (from 5% at the initial interview to 2% at the first follow up). This suggests that respondents completed work they were in the process of by the time of the follow up survey. There was also a decline in the proportion saying they would (definitely or probably) make improvements (15% at initial interview to 7% at first follow up), but a slight increase in the proportion making a decision not to install measures: from 7% at the initial interview to 9% at the first follow up.

It therefore appears that in the intervening time period, respondents have made firmer decisions on the actions they would like to take following their Green Deal Assessment.

Comparing intentions and actions within households

To enable us to look at changes in intentions and actions on a household basis, comparisons were made between responses made at the initial and follow up interviews. Table 7 compares the furthest point that respondents had reached at the time of each interview. Categories at the top of the table show the furthest point reached at the initial interview, and categories down the side show the furthest point at the follow up interview. Cells in the table are based on all those interviewed in the follow up survey (but excluding households from the Wave 1 Assessment survey).

Fifty eight per cent of all households said they had installed at least one measure at the time they were initially interviewed. Five per cent of all households said at their initial interview that they were in the process of installing measures, and these measures had been installed by the follow up survey. A further 1% said that measures were in the process of being done at the initial interview, and still were at the first follow up, but very few had started the process of installing measures and had not completed it.

³⁰ Base: All installing loft insulation (except Wave 1 Assessment survey) (236)

³¹ Base: All installing cavity wall insulation (except Wave 1 Assessment survey) (272)

³² Base: All installing boiler (except Wave 1 Assessment survey) (115)

³³ Base: All installing solid wall insulation (except Wave 1 Assessment survey) (138)

Table 7: The furthest point in the Green Deal customer journey that respondents had reached (initial survey / first follow-up survey comparison)

NOTE: Percentages shown are the proportion of all first follow up households (except Wave 1 Assessment survey)

		Further point at initial survey					
		Has been done	In the process of being done	Definitely /probably will	Might/ might not be done	Definitely /probably won't be done	Not made a decision/ other^
Further point at 1 st follow-up survey	Installed at initial survey	58%					
	Installed since initial survey		5%	9%	1%	2%	3%
	In the process of being done		1%	1%	*	*	-
	Definitely/probably will be done		*	3%	1%	1%	1%
	Might/might not be done		-	1%	1%	*	1%
	Definitely/probably won't be done		-	1%	2%	3%	2%
	Not made a decision/other^						1%

Base: All first follow up survey respondents (except Wave 1 Assessment survey) (897)

^ only those who had not received a Green Deal Advice Report were able to give these responses which included: Not made a decision because I've not received my Green Deal Advice Report yet; The assessor did not recommend this; I don't know/can't remember if the assessor recommended this and Don't know.

Most of those who said they definitely/probably would install measures at the initial interview had gone on to do so: 9% of all respondents had done so, and 1% said they were in the process of installing. The links between intentions and actions were less clear when moving further away from having intentions to install at the initial interview, but it is still notable that 6% of all respondents said they might/might not, definitely/probably wouldn't or didn't know what they would do at the initial interview, but had gone on to install a measure.

It is also notable that 3% of respondents who said that they had not made a decision on what to do at the initial interview, had gone on to install at least one measure.

There were some key differences in customer journeys between ECO funded and non-ECO funded households:

- Three quarters (74%) of ECO funded households³⁴ had had at least one measure installed by the time of the initial survey, and all of those who said they were in the process of having measures installed, that they definitely/probably would have measures

³⁴ Base: All ECO funded households (except Wave 1 Assessment survey) (434)

installed or might or might not have measures installed at the initial survey went on to have a measure installed.

- Amongst non-ECO funded households³⁵, two fifths (37%) had installed at least one measure by the time of the initial survey, but a lower proportion had actioned their intentions by the time of the first follow up. While most of those who said they were in the process of installing a measure had gone on to do so - 5% of all non-ECO funded households - 1% were still in the process and a further 1% had decided not to install. While 9% of non-ECO funded households said they definitely/probably would install a measure and had gone on to do so, 14% had not, including 2% who by the follow up interview said that they definitely/probably would not install.

Comparing intentions and actions for measures

Looking at this on the basis of measures, the 1,018 respondents³⁶ who were asked about their intentions at the initial and follow up interviews (excluding the Wave 1 Assessment survey) were recommended a total of 2623 measures. Of these, 776 (30%) were reported by respondents as having been installed at the time of their initial interview, and a further 330 (13%) as having been installed since the initial interview (i.e. 8-14 months since the original assessment). For two fifths of measures, respondents' intentions stayed the same. Table 8 summarises the stages of installation/intentions for all recommended measures.

Table 8: Follow up survey Post assessment actions and intentions

Stage of post assessment journey and intention to install by % of recommended measures (raw figures shown where base size is less than 100)					
Measure (brackets show the weighted number of respondents recommended each)	Installed by initial interview	Has been installed since initial interview	Intentions stayed the same	More intention to install than at time of initial interview	Less intention to install than at time of initial interview
All measures (2623) number	776	330	1051	261	205
All measures (2623) %	30%	13%	40%	10%	8%
Cavity wall insulation (398)	63%	16%	10%	6%	5%
Loft insulation (344)	64%	12%	16%	4%	4%
Floor insulation (295)	3%	3%	77%	8%	9%
New boiler (287)	34%	16%	29%	14%	7%
Solid wall insulation (285)	21%	24%	32%	11%	12%
Heating controls (203)	34%	18%	31%	12%	5%

³⁵ Base: All non-ECO funded households (except Wave 1 Assessment survey) (257)

³⁶ Weighted base shown (unweighted base equals 897)

Stage of post assessment journey and intention to install by % of recommended measures (raw figures shown where base size is less than 100)					
Measure (brackets show the weighted number of respondents recommended each)	Installed by initial interview	Has been installed since initial interview	Intentions stayed the same	More intention to install than at time of initial interview	Less intention to install than at time of initial interview
Solar photovoltaic (273)	5%	4%	69%	12%	9%
Solar thermal (197)	2%	1%	77%	12%	8%
Double/triple/secondary glazing/ replacement doors (105)	8%	13%	48%	23%	8%
Other measures (236)*	19%	17%	42%	11%	12%

Base: All first follow up survey respondents (except Wave 1 Assessment survey) (bases shown on table). 'Other measures' have been combined because of low base sizes

* Other measures includes: Draught proofing (99); Hot water cylinder insulation (66); Flat roof/room in roof insulation (37); Other heating upgrade (19); Ground Source Heat Pump, Air Source Heat Pump, Wind turbine (roof mounted) and Waste water heat recovery (15).

As previously noted, cavity wall insulation and loft insulation were the most likely to have been installed by the time of the initial interview. Solid wall insulation, new boilers (and associated measures such as heating controls), and cavity wall insulation were the most likely to have been installed since the initial interview. These three measures were the most likely to have been financed by ECO³⁷, which may go some way to explaining why these measures had most commonly been installed at all, and most likely to have been installed since the initial interview.

It is notable that solid wall insulation was the most likely measure to be associated with lower intentions to install at the follow up interview than at the initial interview (12% of recommendations of solid wall insulation were associated with lower intentions), as well as floor insulation (9%) and solar measures (9% solar photovoltaic, 8% solar thermal).

Reasons for intentions remaining unchanged or for lower intentions

Households that had not moved any further towards the process of installing a recommended core measure³⁸ (i.e. they had said at the initial survey that they were in the process of installing

³⁷

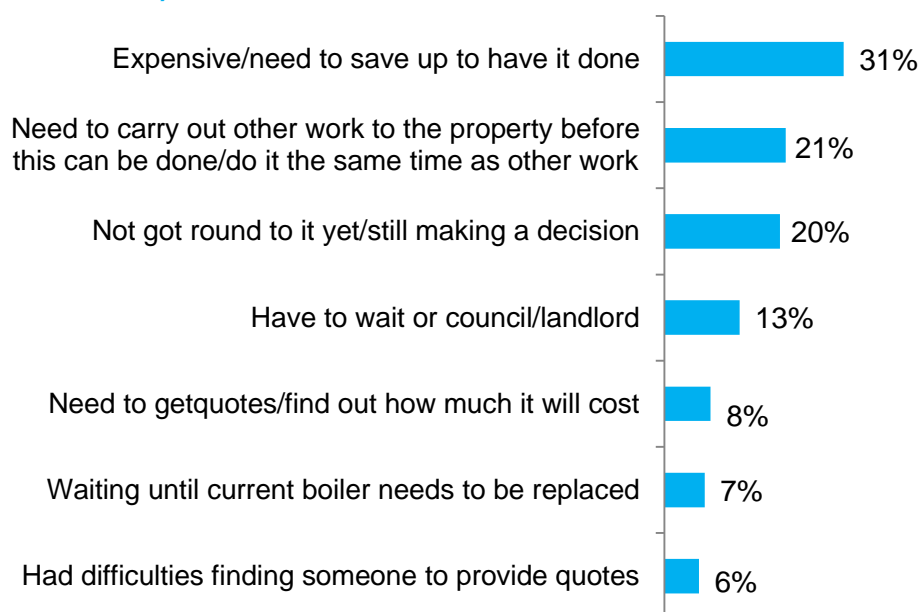
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/244349/statistical_release_green_deal_eco_great_britain.pdf

³⁸ Core energy saving improvements include: Loft insulation, cavity wall insulation, solid wall insulation, flat roof insulation, room in roof insulation, floor insulation, new boiler, solar photovoltaic, solar thermal, replacement windows/doors

a measure, definitely would install it, probably would install it or might install it, and gave exactly the same response at the first follow up survey) were asked why this was.

Reasons for not having progressed towards installation included cost (31%), needing to wait to carry out other work first (21%) and not having reached a firm decision (20%). This shows that for some, the route towards installation is a long-term process, for reasons of financing, practicality, timing or simply inertia. Chart 9 below shows reasons given by 5% or more of those that were no more likely (or less likely) to install a core measure at the follow up survey than at the initial survey.

Chart 9: Reasons for not having moved towards installing a measure (reasons mentioned by 5% or more shown)



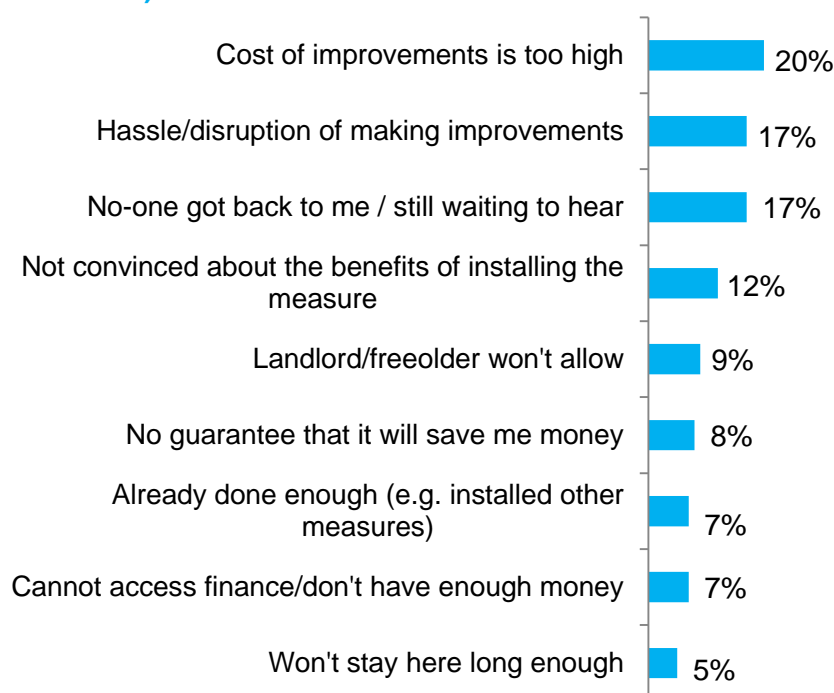
Base: All first follow up survey respondents (except Wave 1 Assessment survey) that had not changed intention to install a recommended core measure (73) Caution, low base

Although base sizes were too small to allow detailed analysis by individual measures, there was some indication that certain reasons for not having moved towards installing a measure tended to be given for particular measures (note that the following findings should be treated with caution due to very small base sizes, and are intended as indicative only):

- Four out of 13 households that had made no progress towards having solid wall insulation installed said they had had difficulties finding someone to provide quotes or carry out the work
- Five out of 13 households that had made no progress towards having floor insulation installed said they had not got round to it/were still thinking about it and four said that it was expensive/they would need to save up to have it done
- Eight out of 18 households that had made no progress towards installing a new boiler cited cost ('expensive/need to save up to have this done'); six of the 18 were waiting until their current boiler needed replacing
- Cost/the need to save up was again highlighted mentioned by nine out 15 households that had made no progress towards having upgraded or new windows and/or doors installed
- The need to carry out other work to their property was mentioned in relation to loft insulation (by four out of 17 households) and cavity wall insulation (3 out of 10)

Households that had become less likely (since the initial survey) to install a core measure gave a broad range of reasons for this, including the cost being too high (20%), the hassle of making the installation (17%) and no-one getting back to them³⁹ (17%). Chart 10 below shows reasons given by 5% or more of those that had become less likely to install a core measure.

Chart 10: Reasons for having become less likely to install a measure (reasons mentioned by 5% or more shown)



Base: All first follow up survey respondents (except Wave 1 Assessment survey) that had become less likely to install a recommended core measure (94) Caution, low base

Although base sizes were too small to allow detailed analysis by individual measures, there was some indication that certain reasons for becoming less likely to install were associated with particular measures (note that the following findings should be treated with caution due to very small base sizes, and are intended as indicative only):

- Four out of 12 households that had become less likely to install cavity wall insulation said that no-one had got back to them/they were still waiting to hear
- Nine out of 30 households that had become less likely to install solid wall insulation said it was because the cost of this improvement was too high; 4 out of 14 households that had become less likely to install a new or replacement boiler gave the same reason
- Six out of 22 households that had become less likely to install floor insulation cited the hassle/disruption of making improvements
- Five out of 16 households that had become less likely to install solar photovoltaic panels said they were not convinced about the benefits of installing the measure; the same number said their landlord/freeholder won't allow this measure to be installed

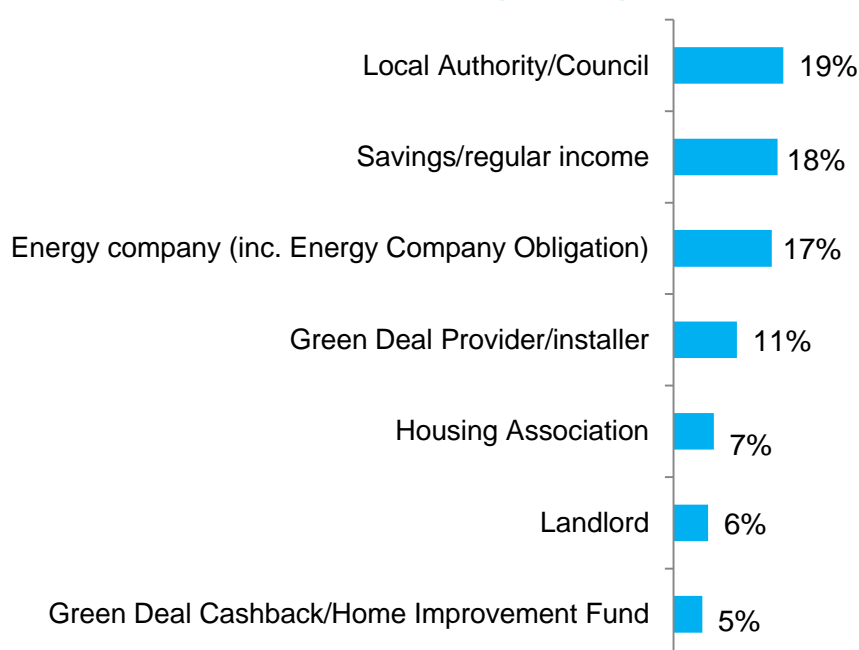
³⁹ This response was derived from coding 'other' responses and therefore could include installers, Green Deal providers or other organisations involved in the installation/financing process

Financing installations

All who had installed measures (before or since completing the initial interview) were asked how the work was paid for: responses should be treated with caution, as evidence from the initial surveys suggests that respondents often do not know how installations are funded⁴⁰.

A fifth (19%) of those who had installed any recommended core measures said that the measure was paid for by the Local Authority, and a similar proportion (18%) said that they had paid from savings or regular income (Chart 11). Overall, 64% said that the work was financed by a third party (e.g. energy company, local council, landlord), 24% that it was self-financed (e.g. from savings, personal loans) and 8% said that they used some form of Green Deal funding (e.g. Green Deal finance, cashback, Home Improvement Fund).

Chart 11: How installed measures were paid for (methods mentioned by 5% or more shown)



Base: All first follow up survey respondents who have installed a recommended core measure (except Wave 1 Assessment survey) (702)

Few respondents said that they had used multiple methods to finance installations: 88% of those who were able to answer about how installations were financed⁴¹ mentioned only one method of financing from a possible four categories (e.g. self-finance, third party, Green Deal funding or other), and 12% mentioned two methods (most commonly self-finance and third party (6%) or Green Deal funding and self-finance (4%))⁴². Two respondents mentioned three methods of funding: both of these respondents used a combination of self-finance, third party funding and Green Deal funding.

⁴⁰ For example, at Wave 2 of the Green Deal Customer Journey Survey (available at: <https://www.gov.uk/government/collections/green-deal-assessments-research>), 21% of households which had installed a core measure said the measure was “free” (that is, it was paid for by a third party but they did not know exactly who).

⁴¹ Base: Households which had at least one measure installed at the initial or first follow up interview and gave at least one answer (not don’t know) when asked how measures were funded (694)

⁴² In addition, 1% said they had used Green Deal and third party funding and 1% said they had used some other funding in conjunction with either Green Deal or self-financing.

There were no strong differences in the payment methods employed by those installing measures before their initial interview, or those installing measures between the initial and first follow up interviews. For example, 63% of those who installed measures before their initial interview said that these were financed by a third party, compared with 58% of those installing measures between the initial and first follow up interviews⁴³ (Table 12).

Table 12: How households paid for measures installed by when installed

	Households installing key selected measures	
	... before the initial interview (516)	...between initial and first follow up interview (186)
Self-finance (including paid from savings, loan, mortgage extension)	21%	26%
Third party (including Local Authority/Council, Housing Association, Landlord, Energy Company, 'Free')	63%	58%
Green Deal (including Green Deal Finance, Green Deal Cashback, Green Deal Home Improvement Fund)	7%	9%
Other	2%	2%
Don't know	7%	4%

Base: All first follow up survey respondents (except Wave 1 Assessment survey) installing selected core measures before initial interview and between initial interview and follow up survey.

Overall, 58% of households reporting that they had installed any measures at either of the initial interview or first follow up said that the measures installed were funded by third parties *only*, and the household did not contribute towards the measure or fund the measures using Green Deal Finance, Cashback or Home Improvement Fund.

Of those households which had had measures installed using third party funding only:

- 90% were ECO funded households, 10% were not ECO funded
- 64% were owner-occupiers, 27% were social tenants and 9% were private tenants
- 60% were in households receiving any means tested benefits

Amongst those households which had had measures installed using third party funding only⁴⁴, the main ECO measures most commonly installed were: cavity wall insulation (52%), loft insulation (40%) and solid wall insulation (17%). Five per cent of third party only funded households had had a boiler installed⁴⁵.

⁴³ This excludes those that had installed a measure before the initial interview and went on to install an additional measure(s) between the initial and first follow up interview

⁴⁴ Base: Households which had at least one measure installed at the initial or first follow up interview and reported that all measures installed were paid for by third party funding only (420)

⁴⁵ Responses add up to more than 100% given that some households had more than one measure installed

Amongst those households which had had measures installed using third party funding only, 82% had had one measure installed, 16% had had 2 measures installed and 2% had had 3 measures installed.

It was also of interest to establish whether households installing third party funded measures also contributed to funding these or other measures: 9% of those receiving third party funding for measures also self-funded (this could be putting money towards the same measure, or funding other measures). In addition, 1% of those receiving third party funding also used Green Deal funding in some way (e.g. Green Deal Finance, Green Deal Cashback, Green Deal Home Improvement Fund).

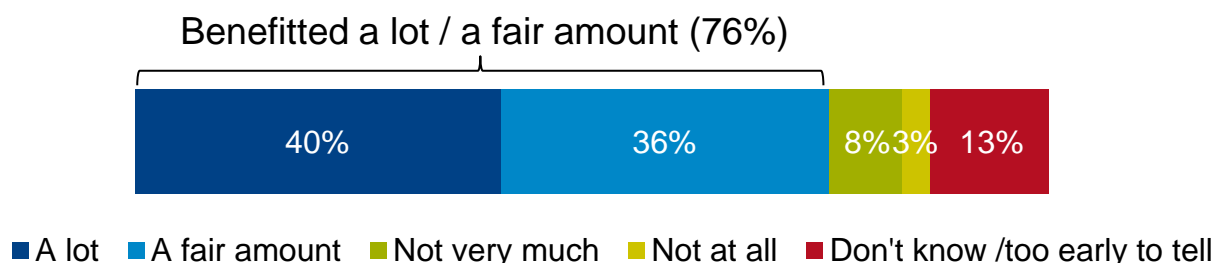
Overall, 8% of households which had installed measures said they had used any Green Deal funding (e.g. Green Deal Finance, Green Deal Cashback, Green Deal Home Improvement Fund). While households using Green Deal funding should also pay towards measures in some other way, only 45% of those using Green Deal funding⁴⁶ said they had also self-funded the measure, and 11% said that the measure was also paid for by a third party. Just under half of those saying they had used Green Deal funding to pay for the installation said that this was the only funding method they had used. These findings underline the fact that households find it difficult to articulate how installations are funded.

Post-installation outcomes and likelihood to recommend the Green Deal process

Households that had installed any recommended energy saving measure (at either the initial or first follow up survey) were asked about the extent to which they felt they had benefitted from having energy saving measures installed. It should be noted that this question was asked across all measures that had been installed - as opposed to being asked for each individual measure installed - so where a household had installed multiple measures they were answering about these in combination.

Three-quarters (76%) felt that they had benefitted either a lot or a fair amount from having installed energy saving measures (Chart 13), whilst 8% said they had benefitted 'not very much' and 3% 'not at all'. The remainder (13%) did not know or felt it was too early to tell.

Chart 13: Extent to which households felt that they had benefitted from having energy saving measures installed (NOTE: households were asked this question on the basis of all measures they had installed, rather than for each measure individually)



Base: All first follow up survey respondents (except Wave 1 Assessment survey) that had installed any recommended measures (702) ⁴⁷

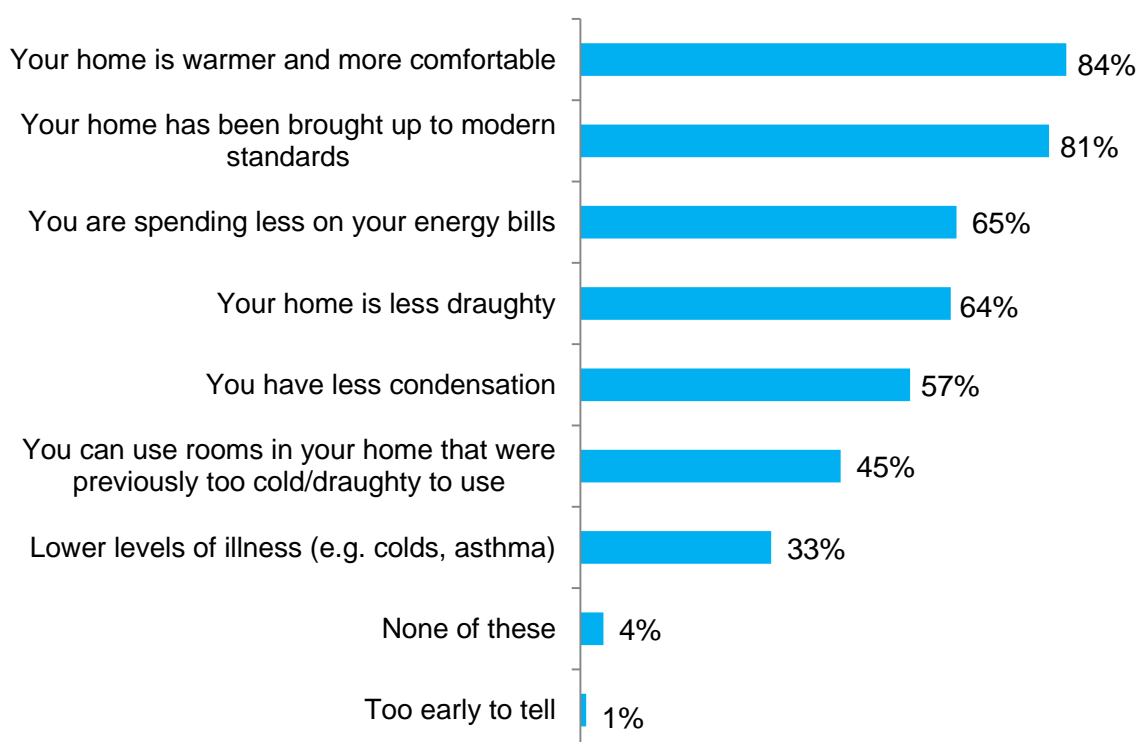
⁴⁶ Base: Households which had at least one measure installed at the initial or first follow up interview and reported that measures installed were paid for by Green Deal funding (65)

⁴⁷ This question was only asked from the Wave 2 Assessment survey onwards

Although this question was not asked specifically about individual measures, households that had installed solid wall insulation⁴⁸ were more likely than average to feel that they had benefitted a lot/a fair amount from the measures installed (84% compared with 76% on average, with 50% saying they had benefitted 'a lot').

Households were also asked about specific benefits they may have noticed as a result of their installation(s)⁴⁹. The main benefits reported by households that had made energy saving home improvements were that their homes were warmer and more comfortable (84%) and had been brought up to modern standards (81%). Two-thirds each reported a reduction in their energy bills (65%) and a less draughty home (64%). Very few (4%) had noticed none of the benefits read out to them (Chart 14).

Chart 14: Benefits noticed by households as a result of the energy saving home improvements which have been made



Base: All first follow up survey respondents (except Wave 1 Assessment survey) that had installed any recommended measures (702)⁵⁰

Amongst households that had installed any measure, social tenants were more likely than owner occupiers and private renters to report a number of benefits - a less draughty home (73% compared with 64% on average⁵¹), less condensation (71% compared with 57% on average) and being able to use rooms that were previously too cold to use (58% compared with 45% on average) - although these differences were likely to be linked to the type of measures installed given that this group were considerably more likely than owner occupiers and private renters to have had solid wall insulation installed.

⁴⁸ Base: All households (except Wave 1 Assessment survey) that had installed solid wall insulation (138)

⁴⁹ Respondents were asked to choose from a list of benefits read out to them by the interviewer

⁵⁰ This question was only asked from the Wave 2 Assessment survey onwards

⁵¹ Base: All social tenants (except Wave 1 Assessment survey) that had installed any recommended measures (138)

For example, amongst those that had installed solid wall insulation⁵²:

- 94% felt their home was warmer and more comfortable (compared with 84% on average)
- 80% felt their home was less draughty (compared with 64% on average)
- 72% felt there was less condensation (compared with 57% on average)
- 57% said they could use rooms that were previously too cold to use (compared with 45% on average)

All households were asked about the likelihood of them recommending the Green Deal process to family and friends⁵³. Overall, three-quarters (76%) said that they had or would recommend the Green Deal process, whilst only 15% said they (probably or definitely) would not. Social tenants were significantly more likely than average to say they had or would recommend the Green Deal process: 81% said they had or would recommend it compared with 76% on average (78% of private tenants and 74% of owner occupiers gave this response)⁵⁴.

As shown by Chart 15, there were also significant differences in response based on whether a household had received ECO funding, with 84% of ECO funded households saying they had or would recommend the Green Deal process, compared with 64% of non-ECO funded households. A quarter of non-ECO funded households (25%) said that they would not recommend the process. It should be noted however, that the nature of the ECO scheme (i.e. households being offered and receiving predominantly fully funded energy saving measures) could be expected to lead to high levels of satisfaction.

Excluding ECO funded households (given the high proportion that had installed a measure), it was seen that likelihood to recommend was influenced by whether a household had proceeded to installation or not. Amongst non-ECO funded households that either had installed or were in the process of installing any measure⁵⁵, 73% said they had or would recommend the Green Deal process. This compared with 50% of non-ECO funded households that had not proceeded to installation by the time of the first follow up survey⁵⁶.

⁵² Base: All households (except Wave 1 Assessment survey) that had installed solid wall insulation (138)

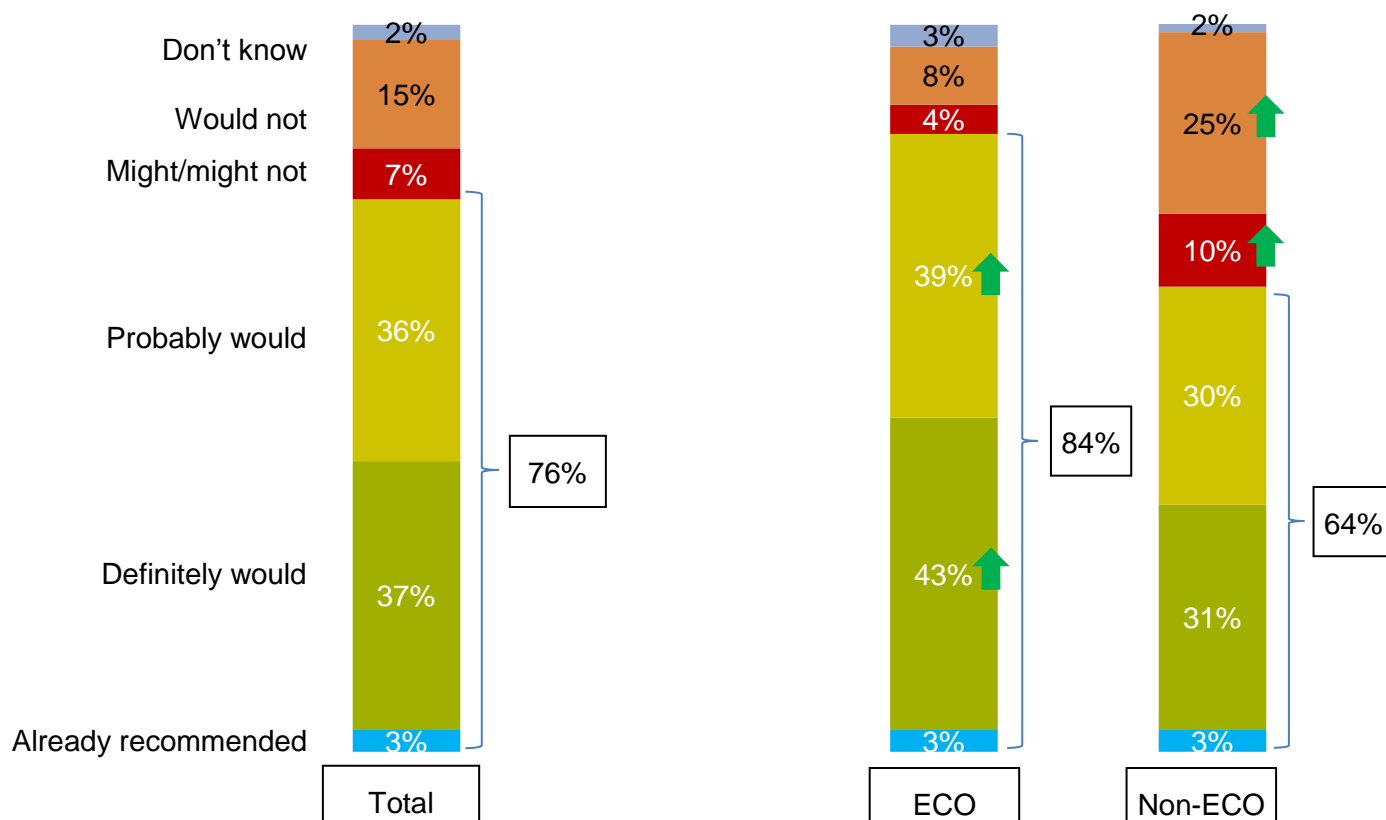
⁵³ Respondents were asked: "And taking everything into account, to what extent would you recommend the Green Deal process to friends or family? This includes having a Green Deal Assessment, finding out about/using Green Deal finance, and making energy saving home improvements."

⁵⁴ Base: All owner occupiers (800); All social tenants (212); All private tenants (75) Caution, low base

⁵⁵ Base: All non-ECO funded households that had installed or were in the process of installing any recommended measure (178)

⁵⁶ Base: All non-ECO funded households that had not installed/were not in the process of installing any measures (146)

Chart 15: Likelihood of recommending the Green Deal process to family and friends



Base: All first follow up survey respondents (1,087); ECO funded households (496); Non-ECO funded households (324)

Significant differences between ECO and non-ECO funded households are indicated by arrows (↑)

4. Second follow up surveys

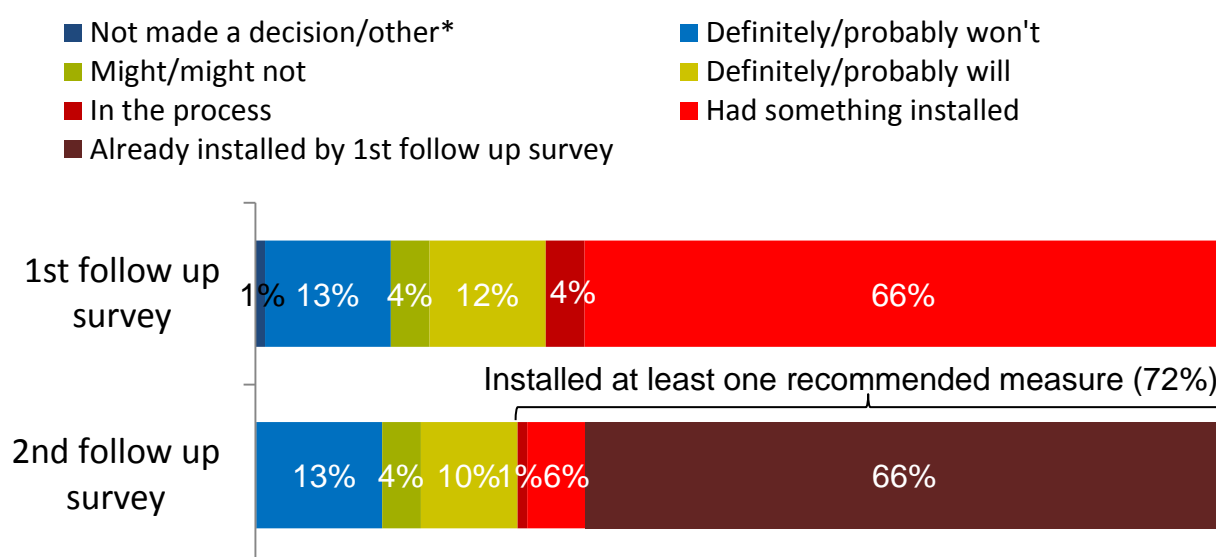
The second follow up surveys interviewed a subset of households (226 in all) that had taken part in the first follow up surveys for waves 1 and 2 of the Assessment surveys, and who had agreed to be recontacted again. Data from the second follow up surveys were re-weighted to be representative of the period covered by the research (i.e. January to June 2013). Direct comparisons between the data in this section and the previous section (as well as previously published reports) should therefore be avoided. Results from the first follow up are therefore re-presented below with the appropriate weighting applied.

Intentions and actions

Chart 16 below shows the furthest point that all of the 226 households interviewed in the second follow up surveys had reached at the time of the first follow up survey and the second follow up survey (with the second follow up surveys conducted a further five to eight months after the first follow up and around 14-15 months after the initial survey)⁵⁷.

After the first follow up survey, 66% of respondents said they had installed at least one measure, and by the time of the second follow up survey a further 6% had moved on to install at least one measure. This means that in total almost three quarters (72%) of households interviewed said they had installed at least one measure at the time of the second follow up survey, highlighting the fact that measures recommended by a Green Deal Assessment continue to be installed up to 19 months after the assessment.

Chart 16: The furthest point in the Green Deal customer journey that respondents had reached (first follow up survey / second follow up survey comparison)



Base: All second follow up survey respondents (226) only those who had not received a Green Deal Advice Report were able to give these responses which included: Not made a decision because I've not received my*

⁵⁷ It is possible that consumers were at different stages with two or more measures, and the chart only shows the furthest point along the customer journey that they were at. For example, if a consumer had installed one measure and was in the process of installing another they are only shown once under 'Had something installed'.

Green Deal Advice Report yet; The assessor did not recommend this; I don't know/can't remember if the assessor recommended this and Don't know.

At both the first and second follow up surveys, ECO funded households were more likely non-ECO funded households to say they had installed at least one measure (Table 17).

Table 17: The furthest point in the Green Deal customer journey that respondents had reached (first follow up survey / second follow up survey comparison) by whether ECO funded

	Whether ECO funded		
	All respondents (226) %	ECO funded (80) %	Non-ECO funded (93) %
1st follow up survey			
Have had this done	66%	91%	47%
In the process of doing this	4%	*	7%
Definitely/probably will do this	12%	-	24%
Might or might not do this	4%	4%	6%
Definitely/Probably won't do this	13%	4%	15%
Not made a decision/not recommended/DK	1%	1%	1%
2nd follow up survey			
Already installed by 1 st follow up survey	66%	91%	47%
Have had this done (since first follow up survey)	6%	2%	9%
In the process of doing this	1%	-	2%
Definitely/probably will do this	10%	-	19%
Might or might not do this	4%	3%	5%
Definitely/Probably won't do this	13%	4%	17%
Not made a decision/not recommended/DK	-	-	-

Base: All second follow up survey respondents (bases shown on table). Caution, low bases.

Overall, 9% of households (20 out of 226) had installed a recommended measure since the first follow up survey: 6% (13 out of 226) for the first time since their Green Deal Assessment and 3% (7 out of 226) in addition to any measures already installed by the time of the first follow up survey.

In terms of the number of recommended measures installed, 212 of 595 recommended measures had been installed at the time of the first follow up survey; and an additional 27 measures had been installed at the time of the second follow up survey. These comprised:

- Solid wall insulation - 7
- Heating controls - 4
- New/replacement boiler - 3
- Replacement doors - 3
- Double/triple glazing - 2
- Draught proofing - 2
- Loft insulation, cavity wall insulation, solar thermal panels, floor insulation, hot water cylinder insulation, other heating upgrade - 1 each

Although base sizes limit detailed analysis of the households that had installed measures between the first and second follow up surveys - meaning the following findings should be treated with extreme caution - there was an indication that the solid wall insulation installations were local authority-led. Four of the five households⁵⁸ asked about how they financed their solid wall insulation installation said it was paid for by their local authority or council and three of these also indicated - when asked about their reasons for having the measure installed - that the work was required by their landlord or local authority. The remaining one solid wall insulation installation was paid for through a combination of ECO and self-financing.

⁵⁸ To ensure that the questionnaire remained manageable and survey respondents remained engaged with the interview - given that some households were recommended several measures - the initial and follow up surveys only asked in detail about financing and reasons for installation for up to three core energy saving improvements. Therefore in this instance, whilst seven households had installed solid wall insulation between the first and second follow up surveys, they were only followed up about financing and reasons for installation in five of these cases.

5. Conclusions

The follow up surveys conducted with households receiving a Green Deal Assessment have been helpful in understanding their longer-term views and actions. For some, in particular social tenants, there was often a time lag between the assessment and installation of measures. Therefore estimates taken from the initial surveys only will have under-estimated the number of measures installed.

In addition, the follow up surveys have been effective in understanding how intentions have been translated into actions. It is positive to see that few of those who start the process of installing do not go on to complete it, and the conversion from engagement to installation amongst ECO funded households is particularly strong.

However, some non-ECO funded households were stalling in their journey to installation and there may be some scope to recontact households which have had an assessment after a time to keep them motivated and discuss what additional support could be helpful to them in moving on to install measures. While cost was stated as the predominant factor stalling households in their customer journey, some had encountered supply side issues and others were waiting for someone to get back to them. Any actions which encourage a further 'pull' from consumers could be helpful.

However, the fact that a half of ECO funded households and a quarter of non-ECO funded households had not received a Green Deal Advice Report by the time of the first follow up survey may represent a missed opportunity. The Green Deal Assessment process should give a holistic view of energy saving installations and behaviours for that household, and the fact that so many are not receiving their report means that a large number of households are missing out on the personalised information and advice that their report could give⁵⁹.

It is notable that most of those experiencing the Green Deal process said that they would recommend it to family/friends: even half of non-ECO funded households which have not installed any measures still said they would do so. This suggests that the process is positive for many, even if they have not yet taken action as a result, and continued positive word of mouth could be effective in encouraging more households to consider the Green Deal.

While solid wall insulation is the most expensive measure, it is positive to note that those who have had it installed were the most likely to feel the benefits of the installation.

⁵⁹ It should be noted that not all households that receive a GDAR will read it. For example, unpublished findings from waves 1 and 2 of the Customer Journey initial survey showed that around a quarter (29% at Wave 1 and 24% at Wave 2) of those that had received a GDAR had not used or looked at it at all.

6. Technical notes

Methodology and overview of surveys

The follow up surveys were conducted with households that had taken part in the initial Green Deal Assessment/Customer Journey surveys and had consented to being recontacted (and provided a valid telephone number for this purpose). Table 17a shows the number of interviews completed in the initial survey at each wave: all respondents were asked for their consent, and all consenting and providing usable telephone contact details were included in the issued sample for the follow up surveys (shown under 'Issued sample' in the table).

The results shown in this report are based on 1,087 first follow up interviews and 226 second follow up interviews. First follow up interviews were conducted with a sample of households which had a Green Deal Assessment between January 2013 and March 2014 (excluding the period November-December 2013). Second follow up interviews were conducted with a sample of households which had a Green Deal Assessment between January and June 2013.

Fieldwork was conducted using telephone interviewing.

A summary of the fieldwork dates and number of interviews conducted for each wave is shown below.

Table 17a: Overview of first follow up surveys

Survey wave	GD Assessment period covered	Fieldwork dates	Completed interviews in initial survey	Issued sample	Number of interviews
Assessment survey					
Wave 1	Jan-Mar (Q1) 2013	19 Nov - 1 Dec 2013	507	338	190
Wave 2	Apr-Jun (Q2) 2013	27 Jun - 24 Jul 2014	499	300	157
Wave 3	Jul-Sep (Q3) 2013	27 Aug - 1 Oct 2014	500	339	158
Customer Journey survey					
Wave 1	Oct 2013 ⁶⁰	17 Sep - 14 Oct 2014	439	411	196
Wave 2	Jan-Mar (Q1) 2014	10 Feb - 15 Mar 2015	946	807	386

⁶⁰ Wave 1 of the Customer Journey survey only included households that had a Green Deal Assessment during a single month (October 2013) whereas all other waves of the Assessments and Customer Journey research covered a 3-month Green Deal Assessment period.

Table 17b: Overview of second follow up surveys

Survey wave	GD Assessment period covered	Fieldwork dates	Issued sample (addresses)	Number of interviews
Assessment survey				
Wave 1	Jan-Mar (Q1) 2013	4 Jul - 31 Jul 2014	173	129
Wave 2	Apr-Jun (Q2) 2013	20 Nov - 17 Dec 2014	138	97

All available leads were provided to interviewers. In order to maximise response a number of steps were taken:

- Advance letters were sent to respondents informing them of the survey
- All respondents were offered a conditional £5 voucher for participating
- Interviewers made multiple calls (8+) to each household during the fieldwork period until a final outcome (e.g. productive interview, refusal etc.) was obtained
- The interview was relatively short (on average, 12 minutes for the first follow up surveys and 10 minutes for the second follow up surveys)

The questionnaire for the follow up survey was designed by DECC and GfK NOP in conjunction with ICF International and covered the following topics:

- Receipt of the Green Deal Advice Report (only asked of those who had not received theirs at the time of the initial interview)
- Follow up questions to see if intentions stated at earlier interviews led to actions
- Reasons for having decided to install measures since their initial interview/reasons for not having installed measures since their initial interview
- Ongoing customer experience

Data for both the first and second follow up surveys were initially weighted to the known profile of all households which received a Green Deal Assessment in the relevant time period using the following characteristics: combined region (using four bands: North, Midlands including Wales, South and Scotland), property type and tenure. The profile was taken from the Landmark Database, which records all Green Deal Assessments completed. Where this report combines data from several waves of research to enable findings from the follow up waves to be reported as a whole, a different weighting scheme was required, given that the number of assessments in the corresponding time period and the number of interviews conducted for each wave both differed.

An additional weight was therefore calculated which weights each wave by the volume of assessments conducted within the corresponding time period, ensuring that the total sample is representative of all the Green Deal assessment reports lodged in the assessment period covered.

Analysis was undertaken on the data using statistical tests to determine statistically significant differences. This means that any differences between results are likely to be down to an actual change, rather than survey error associated with the sampling or methodology. As surveys sample the population and don't ask everyone, then there is scope for a small amount of error. Significance tests account for this and can show when there are likely to be real changes.

Confidence intervals

Surveys are conducted because it is much more practical and cost effective than interviewing an entire population. However, we need to know how close our survey estimates are to the 'true' figures if we had interviewed the entire population. Confidence intervals are a statistical device which allows us, using our survey results, to estimate the variation that might be anticipated because a sample rather than an entire population was interviewed. This is essentially a range where the true (overall population) value is likely to sit. In general, the larger the sample, the more sure we can be of the accuracy of our survey estimates, though subject to diminishing returns at larger sample sizes. In other words, if we were to conduct the same survey again we would be more likely to get a similar result if we had a large sample than a smaller sample.

The table below indicates the confidence intervals associated with the first and second follow up surveys (calculated based on the effective sample size⁶¹ at each wave). When calculating confidence intervals, we typically use a 95% confidence interval. This means that we can be 95% sure that the survey estimate reflects the true figure for the entire population.

Table 18: Confidence intervals for first and second follow up surveys

Wave	Sample size	Survey response		
		10% / 90%	30% / 70%	50% / 50%
First follow up survey - all waves	1,087	2.0	3.1	3.4
First follow up survey - excluding Assessment survey Wave 1	897	2.3	3.4	3.8
Second follow up survey	226	4.8	7.4	8.0

The table shows that for the first follow up survey for example (for all waves), the confidence interval for a 50% response would be up to $\pm 3.4\%$. This means that if the survey found that 50% of respondents held a certain view, we could be 95% sure that the true proportion of people in the (overall) population who hold that view would be between 46.6% and 53.4%.

⁶¹ 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. (Effective sample sizes: first follow up survey - 823; second follow up survey - 149)

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