Department of Energy & Climate Change

Research into the Green Deal and ECO Programme Supply Chain

Quantitative and qualitative research with certified Green Deal advisors, assessors and installers

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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
EPC	Energy Performance Certificate
EWI	External wall insulation
GD advisor	Green Deal advisor
GD assessor	Green Deal assessor organisation (GDAO)
GD finance	Green Deal finance
GD installer	Green Deal installer
GD ORB	Green Deal Oversight and Registration Body
GD Plan	Green Deal Plan
GD provider	Green Deal provider
GD	Green Deal
GDAO	Green Deal assessor organisation
GDAR	Green Deal Advice Report
GDCC	Green Deal Central Charge Database
GDFC	Green Deal Finance Company
GDIP	Green Deal Improvement Plan
GPS	Government Procurement Service
OA	Occupancy Assessment
PAS2030	Publicly Available Specification 2030
PV	Solar Photovoltaic
RdSAP	Reduced Data Standard Assessment Procedure
SWI	Solid wall insulation

Executive Summary

The Green Deal and Energy Companies Obligation supply chain

In September 2013, ICF International was commissioned by DECC to carry out research into elements of the Green Deal (GD) and Energy Companies Obligation (ECO) programme supply chain. This study forms part of the evaluation of the GD and ECO programme that is being led by ICF International. Three 'roles' within the GD supply chain were included within the scope of this study:

- **Advisors**: individuals operating as sole traders, or under contract to GD assessor organisations, and certified to provide GD assessments. They may also undertake other property surveys for the ECO programme or the wider market.
- **Assessors (also known as GD assessor organisations, or GDAOs)**: businesses that are certified to provide GD assessments. GDAOs may also offer other property surveys and other activities including installations and finance.
- **Installers**: businesses that install measures under GD and/or ECO, that may also offer GD assessments and finance.

Note that this study does not cover the activities of GD providers (which formed the subject of another study undertaken as part of the evaluation of the GD and ECO programme), and does not cover all of the ECO supply chain (since it is possible to deliver under ECO and not be a registered GD supplier).

Study aim and research objectives

The aim of this study was to examine the role of certified GD suppliers in delivering the GD and ECO programme (note that the study did not include GD providers or businesses delivering under ECO that were not certified GD suppliers). To meet this aim, the study was tasked with answering a number of evaluation questions:

- What is the scale and nature of current and expected future levels of activity and demand under GD/ ECO? What is the likelihood of suppliers staying in the GD/ ECO market?
- What is the nature of the business models of different individuals and businesses within the GD supply chain? How are they approaching GD and/or ECO assessments and installations, interacting with consumers, and applying charges and fees?
- What is the scale and nature of the relationships between advisors, assessors and installers? How do they interact with GD providers and other suppliers?
- What are the views of GD suppliers on becoming GD providers?
- What are the views of GD suppliers on the GD certification processes, on GD standards, and on GD tools?

Study methodology and interpreting this report's findings

This study involved a mixture of quantitative and qualitative research with businesses and individuals that were certified GD suppliers. Between January and April 2014, the following primary research was carried out:

- A quantitative telephone survey of a random stratified sample of GD suppliers located in England, Wales and Scotland. The survey consisted of 184 interviews with GD advisors, 120 interviews with GD assessors, and 426 interviews with GD installers (of which 151 were installers of solid wall insulation – SWI).
- In-depth semi-structured qualitative interviews with a purposively-selected sample of GD suppliers that were interviewed as part of the quantitative survey. A total of 28 interviews were completed, consisting of: seven interviews with advisors; seven interviews with assessors; and 14 interviews with installers (of which seven were installers of SWI).

The study also involved analysis of the GD Oversight and Registration Body's (ORB's) register of certified GD advisors, assessors and installers, and analysis of a database of all of the GD Advice Reports (GDARs) that were completed in 2013, in order to explore the distribution of GD assessments amongst certified GD advisors and assessors.

Readers of this report should be aware that, whilst only a proportion of all certified GD advisors, assessors and installers participated in the study, the research design was robust enough to ensure that the results of the quantitative telephone survey were representative of the wider populations of advisors, assessors and installers. That said, readers should always take into account the confidence intervals of the reported data. Confidence intervals are discussed in Chapter 1, and provide a measure of the range within which it is probable that a population value lies. For example, since 28% of surveyed installers reported that their business was established before 2001, we can infer that between 24% and 32% of all certified GD installers were established before 2001. It is especially important that readers take account of confidence intervals when sub-group analysis has been undertaken and base sizes are small. In these cases, any small differences in the data should be treated with caution, though throughout this report only statistically significant differences have been noted in the text.

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

Profile of GD suppliers

Of the businesses/ individuals[1] that were registered as GD suppliers as at the end of October 2013 (when the study team accessed data from GD ORB), installers made up the single largest group by size, followed by advisors. Both these groups were most likely to be registered for a single role (i.e. only registered as installers or advisors). Assessors were the smallest group by number, but 73% of these businesses were also registered as advisors and/or as installers.

GD advisors included a mixture of self-employed sole traders and individuals that were employed directly by one or more GD assessor organisations (70% of the latter sub-group were employed by just one assessor organisation). Qualitative research with a small sample of advisors indicated that some individuals had chosen to become GD advisors in response to changes over the past few years in the Domestic Energy assessor (DEA) market (e.g. the

[1] Some GD advisors were employed by assessor organisations and thus have been referred to throughout as 'individuals' rather than businesses (since they were not self-employed sole traders)

scrapping of Home Improvement Packs and the extension of the validity of Energy Performance Certificates (EPCs) from three to ten years).

Over half (58%) of GD assessors were micro-sized businesses (employed under 10 people with an annual turnover of less than £1.6 million)[2]. Over half (55%) of assessors had been established since 2011, and of these, most had been established principally to serve the GD and/or ECO market.

Almost two thirds (63%) of GD installers were micro-sized businesses. Most GD installers were already in operation when GD was launched, and moved into the market to take advantage of the new opportunities provided. Qualitative research with a small sample of installers found examples of businesses that had become GD installers in order to access ECO funding, and installers that had moved into the GD and ECO market whilst waiting for the Domestic Renewable Heat Incentive (RHI) to start. A few installers in the qualitative research sample noted that it had become a "necessity" to enter the GD supply chain since so many other installers had already done so, whilst one interviewee noted that ECO had had such an impact on their core markets that they felt that they had to participate.

Delivery and demand under GD and ECO

Most advisors and assessors (65% and 83% respectively) had delivered GD assessments at the point of interview (January/ February 2014); where they had not, most were planning to do so in the future. The majority of advisors and assessors (66% and 75% respectively) had delivered GD assessments as part of the ECO programme. Most advisors and assessors were delivering GD assessments under both GD and ECO (57% and 70% respectively).

The distribution of GD assessments amongst advisors and assessors was highly skewed, with 20% of advisors and assessors in the sample responsible for a large proportion of the completed GD assessments in the sample (69% and 83%, respectively). Amongst those advisors and assessors that had delivered GD assessments, most had completed very few assessments. A quarter of advisors that had carried out GD assessments had completed ten or fewer, and a quarter of assessors that had carried out GD assessments had completed 20 or fewer. The median average number of GD assessments carried out by advisors and assessors that had carried out GD assessments was 50 and 120 respectively.

Only a minority (16%) of GD installers had installed measures under GD, with a lack of demand under GD most commonly cited as the reason why this was the case. Most GD installers (75%) were delivering under the ECO programme. Only a small proportion of installers (14%) were delivering installations under both GD and ECO.

The GD/ ECO installation market was also highly skewed, with 20% of installers in the sample accounting for 92% of the installations that had been completed under GD/ ECO in the sample (as at January/ February 2014). Amongst those installers that had carried out installations under GD/ECO, a quarter had carried out 20 or fewer installations, and the median average was 70 installations per installer.

GD assessors were the most likely of all types of GD supplier to rely on GD and/or ECO for all of their income (24% of assessors generated all of their turnover from the GD and/or ECO programme). Just under half of advisors and installers (45% and 44% respectively) generated less than 10% of their income from GD and/or ECO.

Majorities of each type of GD supplier reported that their levels of assessment and installation activity under GD and ECO (particularly GD) had been lower than they had initially expected.

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[2] Using the EU definition of an SME (http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index_en.htm)

Views were mixed on whether demand for assessments and installations under GD and ECO would increase in the near future. Between a third and a half of each type of GD supplier believed that demand under GD would increase over the next six months. Expectations were slightly lower in respect of ECO, with between a quarter and a third of each type of GD supplier expecting demand to grow.

Views amongst interviewees were mixed as to the effect that the 2013 Autumn Statement[3] would have on demand under ECO. Between 29% and 42% of advisors, assessors and installers reported that they expected demand to decrease. Over half of SWI installers (56%) believed that the proposed changes to ECO would result in a decrease in demand for ECO installations.

Qualitative interviews with a sample of GD suppliers found mixed views on the impact of GD cashback on demand under GD and ECO. For some interviewees, cashback had attracted customers by providing a monetary incentive to proceed with an installation. Other interviewees argued that the cashback value had initially been set too low to have a major impact on demand. The increased cashback rates offered after December 2013 were seen by some interviewees to be an improvement, which was expected to generate additional demand (particularly for solid wall insulation).

GD certification, standards and tools

GD suppliers' views on the GD certification process were mixed, with between 35% and 42% of suppliers rating their experience as good, and about the same proportion rating it as poor. These proportions did not vary significantly depending on when a supplier was authorised or business size.

Qualitative interviews with a sample of suppliers explored dissatisfaction with GD certification processes in more detail. Common issues raised by interviewees included: a belief that standards were not being applied consistently across all applicants (resulting in variable quality amongst certified GD suppliers); concerns over the costs of certification, particularly when set against lower than expected income through GD; and a perception that certification was unduly complex, time-consuming, and duplicated existing certification schemes (e.g. the Gas Safe Register) without adding value.

The majority of assessors and installers (64% and 55% respectively) had taken over two months to become certified GD suppliers, whereas for advisors the process was typically quicker (for 43% of advisors it had taken under four weeks).

Most suppliers were satisfied with the information provided by 'their' certification body. Around a third of each type of supplier noted that they wished to receive additional information, with clearer guidance on GD processes and ongoing post-certification support the most common requests. Qualitative interviews with suppliers explored this issue in more depth, and found examples of suppliers that believed there should be: regular updates available about changes to the GD and ECO programme; and better signposting about where to go for information about specific parts of the GD and ECO programme (potentially including a support 'network' that they could utilise).

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[3] Shortly before fieldwork commenced, the Chancellor's 2013 Autumn Statement set out a number of proposed changes to the ECO programme. At the time of fieldwork, these changes included:

- A reduction in the scale of the CERO target, which would primarily affect targets for the delivery of solid wall insulation and/or hard-to-treat cavity wall insulation
- An extension of the targets under CSCO and Affordable Warmth through till 2017

Around half of each type of GD supplier believed that GD ORB was managing the accreditation and registration process effectively. Smaller businesses were more likely to view GD ORB as effective than larger businesses.

The majority of each type of GD supplier believed that the GD Quality Mark improved the reputation of their firm and/or offered reassurances to customers. In-depth qualitative interviews identified some examples where suppliers believed that uncertified operators were using the GD Quality Mark in order to secure work, and then providing misleading information to customers or behaving fraudulently (e.g. taking payment then not delivering services). These interviewees were concerned about these activities, and the damage that this could cause to the GD 'brand'.

The majority of each type of GD supplier believed that the standards and requirements associated with being a GD supplier were fit for purpose. Most advisors and assessors believed that the assessor Specification and the National Occupational Standards for advisors were fit for purpose. Most installers believed that the PAS2030 (Publicly Available Specification 2030) standards were fit for purpose. Moreover, there was also majority agreement that PAS2030 standards were an improvement on what they understood to be previous standards, and that they would eventually become the benchmark used across the installation industry. Qualitative interviews highlighted the importance of the enforcement of standards, with some interviewees reporting that they believed there should be more frequent checks (e.g. as to whether the work of GD installers was PAS2030 compliant).

Just over half of advisors and assessors (60% and 52%) believed that the Occupational Assessment (OA) tool was fit for purpose. The majority of advisors and assessors (72% and 64%) believed that the Reduced Data Standard Assessment Procedure (RdSAP) tool was fit for purpose. Qualitative interviews explored in more depth the reasons why some GD suppliers were dissatisfied with RdSAP. It was suggested that there are ambiguities in the design of the tool, which lead to inconsistencies in interpretation and application (for example, one advisor believed that the treatment of glazing under RdSAP was too simplistic).

Assessments and help with finance under GD and ECO

The majority of advisors and assessors that had delivered or planned to deliver GD assessments reported that they had done so, or expected to do so, on behalf of other organisations. Most advisors and assessors had established, or expected to establish, at least one new relationship as a result of GD and/or ECO, with GD providers and installers commonly identified as new supply chain partners. Potential partners were identified via searches of the GD ORB supplier register or other business directories, or through approaches by other organisations. Qualitative interviews with some GD suppliers identified problems with some of these relationships (e.g. not being paid for work, partners going out of business), and as a result many interviewees were using their own informal assessment processes to scrutinise potential partners.

Advisors reported that the median average duration of a GD assessment was 90 minutes. Three quarters took less than two hours. GD assessments carried out for ECO (median average 60 minutes) were shorter than those carried out for GD. Qualitative interviews with GD suppliers found examples where interviewees believed that assessments driven by ECO requirements were typically focussed on individual measures (e.g. a boiler replacement under Affordable Warmth). It is likely that these single-measure driven assessments would be shorter, though interviewees did not confirm that this was the case.

Most advisors and assessors provided, or planned to provide, some type of advice to customers as part of the GD assessment process. This advice primarily concerned details of the GD Advice Report (GDAR), advice to customers about what they might do next, and energy

efficiency advice. Under half of advisors and assessors (39% and 45%) reported that they specifically recommended a GD provider or GD installer to customers once they had had their GD assessment completed.

Some 60% of advisors reported that they charged for GD assessments. Of those that did not charge, this was primarily because the assessment was paid for by another party, mainly a GD assessor or an energy company. Some 8% of advisors reported that they did not charge for an assessment if customers took out a GD Plan, and qualitative interviews also identified instances where advisors and assessors would refund assessments where the customer proceeded with an installation (regardless of whether this was through the framework of a GD Plan).

Where a charge was levied for a GD assessment, advisors reported that the mean average cost (at the time of the survey in January/ February 2014) was £136. This charge ranged from £60 through to £250. Just under half (46%) of GD advisors 'sometimes' or 'always' varied this charge depending on whether or not the assessment was carried out to meet ECO requirements (either a GD assessment or a property surveyor's report is required for installations under CERO and CSCO).

Installers under GD and ECO

'Conventional' heating measures (boilers) were the measures that installers most commonly offered (71% of installers installed such measures). Around half (51%) of installers installed renewable energy products, and 37% installed insulation measures. This suggests that there was a degree of 'specialisation' or concentration amongst installers. This was particularly true of new market entrants (installers established since 2011), where 44% only offered a single measure, and around two thirds (63%) only offered measures within a single market 'segment' (i.e. conventional heating, insulation or renewable energy products).

Most of the installers that pre-dated the GD did not change the range of measures that they provided in response to becoming part of the GD/ ECO supply chain. Where they did, new types of insulation were the measures that were most commonly added to their service offer.

Most installers reported that they had carried out or expected to carry out GD/ ECO installations on behalf of another organisation, with GD providers the most commonly identified type of organisation. SWI installers had often carried out, or expected to carry out, installations on behalf of local authorities or housing associations. Slightly over half (59%) of all installers had established or expected to establish at least one new relationship with another supplier.

Two thirds of installers (68%) reported that they had experienced delays when carrying out GD installations. Delays that were commonly identified by installers included: problems in securing finance to fund the installation[4]; difficulties in identifying/ securing a GD provider; and/or delays in preparing GD Plans.

Around a third of installers (30%) reported that they had considered becoming GD providers. The complexity of providing finance to customers was the most commonly identified reason why they had not proceeded (an issue for 70% of installers that considered becoming a GD provider), and 64% of this group of installers noted that the complexity of the accreditation process was a barrier. A quarter of installers that considered becoming a GD provider noted that 'other' factors had been a deterrent, which included wider doubts about the GD 'model', such as the GD finance interest rate; lower than expected demand under GD; and uncertainty about future of the GD and ECO programme.

[4] Note that 'delays securing finance' was the option given in the questionnaire; it is thus not known whether survey respondents were referring to delays experienced by customers in securing finance, or delays that they themselves had experienced in securing finance

1. Background and methodology

The Green Deal and Energy Companies Obligation supply chain

1.1. The Green Deal (GD) and Energy Companies Obligation (ECO) programme was launched in January 2013 in order to deliver carbon savings and reduce fuel poverty through energy efficiency improvements in domestic buildings. The programme seeks to promote a market based approach (via GD), albeit one that recognises that a continuing subsidy will be required for certain improvement measures (via ECO).

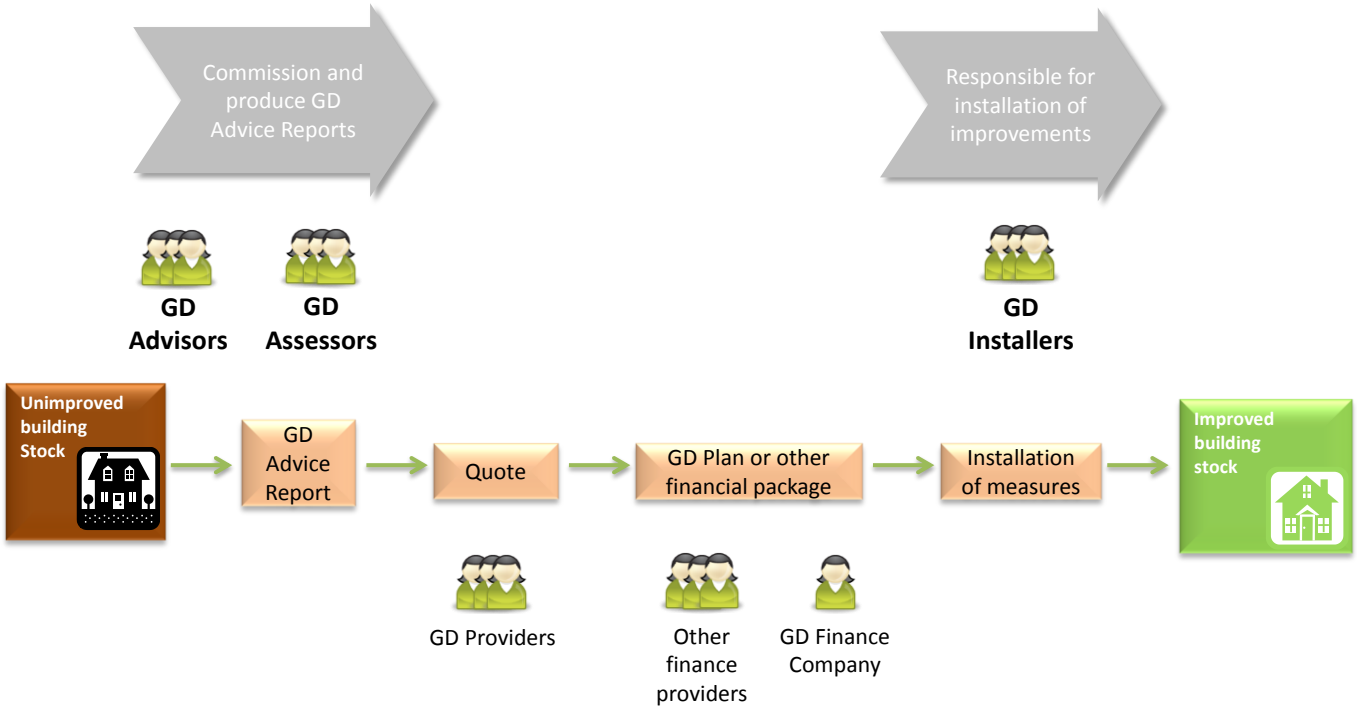
1.2. The GD and ECO programme is delivered by a supply chain consisting of businesses and individuals that fulfil distinct roles. These roles include the following (note that, for the most part, the ECO programme can be delivered by businesses that are not certified GD suppliers):

- **GD advisors**: individuals operating as sole traders, or under contract to GD assessor organisations, and certified to undertake GD assessments (and on the basis of this prepare GD Advice Reports – GDARs – for consumers). GD assessments are the first major 'stage' within the GD 'customer journey', and may also form part of the ECO customer journey. Only authorised GD advisors are allowed to undertake GD assessments.
- **GD assessors (also known as GD assessor organisations, or GDAOs)**: businesses that are certified to provide GD assessments to households. GD assessors may employ GD advisors to carry out GD assessments.
- **GD installers**: businesses that install energy efficiency measures for households. Only authorised GD installers may install measures that are funded via the GD finance mechanism.
- **GD providers**: businesses that organise the financing and installation of energy efficiency improvements, including contracting with other GD suppliers. Only GD providers can provide GD finance and prepare GD Plans.

1.3. Figure 1.1 provides an illustration of the function of these 'categories' of GD supplier within the GD customer journey. Businesses (and individuals in the case of advisors) can and do fulfil more than one role within the GD supply chain, potentially providing a 'one-stop-shop' service from GD assessment through finance arrangement through installation and aftercare.

1.4. Underpinning the GD and ECO supply chain is an 'infrastructure' consisting of various organisations, including: certification bodies, which certify GD assessors and installers; the GD Oversight and Registration Body (GD ORB), which manages the supplier authorisation process; and Ofgem, which administers the ECO programme. The supply chain must also adhere to the regulations, the Code of Practice and other standards that govern the process of delivering GD and ECO and ensure consumer protection.

Figure 1.1: The stages and supply-side actors of the GD customer journey



Research objectives

1.5. In September 2013, ICF International, working with BMG Research, was commissioned by DECC to carry out research into the GD and ECO programme supply chain. This study forms part of the evaluation of the GD and ECO programme that is being led by ICF International.

1.6. The aim of this study was to examine the role of certified GD suppliers in delivering the GD and ECO programme (note that the study did not include GD providers[5] or businesses delivering under ECO that were not certified GD suppliers). To meet this aim, the study was tasked with answering a number of evaluation questions:

- What is the scale and nature of current and expected future levels of activity and demand under GD and/or ECO? What is the likelihood of suppliers staying in the GD and/or ECO market?
- What is the nature of the business models of different individuals and businesses within the GD supply chain? How are they approaching GD and/or ECO assessments and installations, interacting with consumers, and applying charges and fees?
- What is the scale and nature of the relationships between advisors, assessors and installers? How do they interact with GD providers and other suppliers?
- What are the views of GD installers on becoming GD providers?

[5] GD providers were largely omitted from this study because they were included in a separate study consisting of qualitative in-depth research with GD providers. However, since advisors, assessors and installers could potentially also be registered as GD providers, some of the organisations that responded to the survey were GD providers. No questions were asked about their GD provider operations.

- What are the views of GD suppliers on the GD certification processes, on GD standards, and on GD tools?

Study methodology

1.7. This study involved a mixture of quantitative and qualitative primary research with certified GD suppliers, together with analysis of datasets of certified GD suppliers and GD Advice Reports (GDARs) that were completed in 2013. A mixed methods approach was selected in order to provide an overall picture of the operation of the supply chain. Qualitative research was chosen in order to explore the reasons why supply chain actors had adopted their business models. There follows a summary of the study methodology; further detail is provided in a Technical Report which can be found here https://www.gov.uk/government/publications/research-into-the-green-deal-and-eco-programme-supply-chain.

1.8. Readers of this report should be aware that, whilst only a proportion of all certified GD advisors, assessors and installers participated in the study, the research design was robust enough to ensure that the results of the quantitative telephone survey were representative of the wider populations of advisors, assessors and installers. That said, readers should always take into account the confidence intervals of the reported data. Confidence intervals are discussed below, and provide a measure of the range within which it is probable that a population value lies. For example, since 28% of surveyed installers reported that their business was established before 2001, we can infer that between 24% and 32% of all certified GD installers were established before 2001. It is especially important that readers take account of confidence intervals when sub-group analysis has been undertaken and base sizes are small. In these cases, any small differences in the data should be treated with caution, though throughout this report only statistically significant differences have been noted in the text.

Quantitative survey of advisors, assessors and installers

Defining the survey populations

1.9. The subjects of this study were certified GD advisors, assessors and installers, which were treated as three separate populations. Contact details were accessed for all advisors, assessors and installers that were registered with the GD Oversight and Registration Body (ORB) as at the end of October 2013. The GD ORB register included duplicate records, with businesses with multiple trading names sharing the same phone number or address, and advisors with more than one Certification ID (because they had been certified by more than one certification body). In order to avoid contacting the same establishment more than once, the GD ORB register was 'de-duplicated' to identify unique establishments.

1.10. A total of 30 businesses were removed from the populations as they were also certified GD providers. This was because there was a parallel study that involved research with these 30 businesses, and it was necessary to avoid speaking to them twice (note that 74 GD providers were retained within the populations for this study).

1.11. The resulting de-duplicated populations are shown in Table 1.1. Note that suppliers could hold multiple certifications (i.e. certified as advisors, assessors and/or installers).

Table 1.1: Profile of the de-duplicated populations

	Number of individuals/ businesses in the populations		
	Advisors	**Assessors**	**Installers**
Single role only	917	77	1,755
Advisor and assessor	87	87	Not applicable
Advisor and installer	91	Not applicable	91
Assessor and installer	Not applicable	61	61
Advisor, assessor and installer	60	60	60
Sub-total	**1,155**	**285**	**1,967**

Drawing the samples

1.12. Target interview numbers were calculated in order to achieve the levels required to deliver a 95% confidence level and a maximum 5% margin of error, assuming that 50% of respondents gave a particular response (and accounting for finite population correction[6]). Sample sizes were calculated on the basis of an assumed response rate of approximately 33%, which was selected based on BMG Research's experiences of carrying out similar business surveys.

1.13. Four samples were drawn:

- Three 'main' samples were drawn, corresponding to assessors, installers and advisors.
- Due to particular interest in installers of SWI, it was necessary to develop a boost sample of SWI installers[7]. The minimum target for completed interviews with SWI installers was increased by 134 businesses (to 206 in total), in order to achieve the same levels of confidence as the 'main' sample of installers.

1.14. As shown above in Table 1.1, many suppliers held more than one type of certification. In order to avoid surveying an individual or business more than once, it was necessary to allocate individuals and businesses with multiple certifications to a single sample. This meant assigning them to a 'primary role'; that is, designating them as one of advisor, assessor or installer (even though they might fulfil more than one role). This allocation determined which sample they would be included in, and thus which questions they would be asked. Note that data were subsequently weighted to match the distribution of supplier categories in the population. The allocation of suppliers to samples was carried out as follows (see Table 1.2 for an overview of the resultant samples ('primary role'):

[6] A finite population correction is applied where a sample represents more than 5% of the population (as was the case for the samples of assessors, advisors and installers). The correction adjusts the standard error to account for the fact that there is less uncertainty in the results than would be the case when drawing a sample from a very large or infinite population

[7] Some 22.5% of the de-duplicated population of installers was accredited to install SWI (note that this included installers who were also accredited to install other measures, as well as installers who only installed SWI). Out of the target of 322 completed installer interviews, therefore, we would expect around 72 completed interviews with SWI installers

- Suppliers that only had one role were allocated to their respective samples (e.g. installers that were only installers were allocated to the installer sample).
- Since there was only a small number of assessors (285 in total) it was necessary to take something close to a census to achieve sufficient completed interviews. Almost all advisors and installers who were also assessors were assigned the primary role 'assessor'[8]. It was not a complete census of assessors because a decision was made to include some assessors with multiple roles (i.e. assessors that were also advisors and/or installers) within the samples for installers or advisors. This was to ensure that the surveys of installers and advisors included individuals and businesses that had other roles (since this might influence their outlook and responses to the survey). This process was done as follows:
    - A total of 12 assessors[9] that were also installers were selected and included within the installer sample. This included assessor/installers who were SWI installers, due to the need to boost the sample of SWI installers (see below)
    - Another 12 assessors[10] that were also advisors were chosen at random and included within the advisor sample
- All remaining installers were allocated to the installer sample, except for 12 randomly selected installers that were also advisors[11], who were allocated to the advisor sample (again, in order to ensure that the advisor sample included businesses that had multiple roles).
- In order to boost the sample of SWI installers, it was also necessary to allocate 'primary' installation types to the installer sample. The 'main' sample of installers (which included SWI installers) was chosen at random, and the remaining SWI installers were all allocated to the boost sample (due to the relatively small size of the SWI installer population). The survey of SWI installers was thus a census.

Table 1.2: The number of individuals/ businesses in the de-duplicated populations and samples, and the target numbers of completed interviews

	Number of individuals/ businesses			
	De-duplicated population	Sample size (actual role)	Sample size (primary role)	Minimum target number of interviews
Advisors	1,155	557	365	114
Assessors	285	285	261	164
Main sample of installers	1,967	1,298	1,177	322[#]

[8] The effect was to reduce the numbers of primary role advisors and installers in the sample (e.g. the number of advisors fell from 557 to 365)

[9] The number of assessor/ installers in the sample was calculated in proportion to the number of assessor/ installers in the de-duplicated population. This was then doubled on the basis of an assumed 50% response rate, which was higher than the assumed response rate for the sample as a whole (33%), because it was believed that businesses with multiple roles would be more likely to respond to the survey

[10] As above, the number of assessor/ advisors in the sample was calculated in proportion to the number of assessor/ advisors in the de-duplicated population

[11] As above, the number of installer/ advisors in the sample was calculated in proportion to the number of installer/ advisors in the de-duplicated population

	Number of individuals/ businesses			
	De-duplicated population	Sample size (actual role)	Sample size (primary role)	Minimum target number of interviews
SWI installers (main sample of installers + SWI boost sample)	*443*	*443*	*443*	*206*

Note: # excludes 134 SWI installers in the SWI boost sample

1.15. The assessor sample was not stratified as it was close to a census (less the 24 businesses that were allocated to the advisor and installer samples). The samples of advisors and installers were stratified as follows (with proportionate samples being selected across the strata):

- The location of the business (England, Wales or Scotland)
- The date of registration as either an advisor or an installer (whether registered: up to end of Feb 2013; from March 2013 to the end of July 2013; or from August 2013 to the end of October 2013
- *For advisors*: the number of GD assessments they had completed (four bands: unknown or zero; one to nine; between 10 and 50; 51 or more)
- *For installers*: the type of measure that they installed (whether SWI or not SWI)

Fieldwork

1.16. Interviews were conducted using Computer Assisted Telephone Interviewing (CATI) and took place from BMG Research's call centre. Prior to being contacted by telephone, all businesses within the samples were sent an email which introduced the project and offered them an opportunity to opt-out of the research.

1.17. A pilot of 25 interviews took place from 11 to 13 December 2013, after which revisions were made to the questionnaire to reduce the duration and improve question phrasing (meaning that the 25 interviews that were completed had to be discarded). Mainstage interviewing commenced on 16 January 2014, and continued to 17 February 2014. The final mean average interview length was just over 21 minutes, with the shortest interview being 10 minutes and the longest 72 minutes. All contacts in the sample were given an equal opportunity to be interviewed and each contact was tried a minimum of ten times before being labelled as a non-response.

1.18. Figure 1.2 shows the number of completed interviews and response rates for each type of GD supplier.

Figure 1.2: Completed interviews and response rates by type of supplier

Sample	Eligible mainstage sample#	Completed Interviews	Response rate
Advisors	344	184	53%
Assessors	246	120	49%
Installers…	1,125	426	38%

Sample	Eligible mainstage sample#	Completed Interviews	Response rate
…of whom SWI installers	*426*	*151*	*35%*

 # Excludes contacts used for the pilot[12] and mainstage contacts that when asked, indicated that they were not actually GD suppliers[13]

Weighting and reporting conventions

1.19. Random Iterative Method (RIM) weights were applied as follows (bands were the same as was used for sample stratification):

- Assessors and advisors were both weighted according to: the GD supplier roles that they fulfilled (i.e. one or more of advisor, assessor and installer), geography and date of registration (for advisors the number of GD assessments completed was not used for weighting as the data was out of date by the time of interview)
- Installers were weighted according to: the GD supplier roles that they fulfilled (i.e. one or more of advisor, assessor and installer), geography, date of registration and whether or not they were a certified SWI installer

1.20. The following reporting conventions are used throughout this report: all differences between groups and within sub-groups that are commented on in the analysis are statistically significant at the 95% confidence level; reported data are weighted; all base sizes quoted in the report are unweighted; and 'don't know' and 'refused' answers have been omitted from the charts except where they are relevant.

Confidence intervals

1.21. 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).

1.22. 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 426 installers answered a yes/no question and 50% said 'yes', we can be 95% certain that between 45.8% and 54.2% of all installers in the population 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).

1.23. Note that in several places within this report, sub-group analysis has been undertaken (e.g. analysis of the experiences of GD advisors that have delivered GD assessments, rather than all advisors). In these cases the base sizes are lower than the sample sizes shown in Figure 1.3, and the confidence intervals are wider. This means that there is

[12] Completed pilot interviews, refusals and unobtainable numbers. In total 56 contacts were removed for the mainstage sample, consisting of 11 assessors, 33 installers (12 of which were SWI installers), and 12 advisors

[13] Consisting of 4 assessors, 19 installers (5 of which were SWI installers), and 9 advisors

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.

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

Type of actor	Achieved sample size	De-duplicated population	Survey response		
			10% / 90%	30% / 70%	50% / 50%
Advisor	184	1,155	4.0	6.1	6.6
Assessor	120	285	4.1	6.3	6.8
Installer	426	1,967	2.5	3.9	4.2
SWI installer	151	443	3.9	5.9	6.5

Qualitative research with advisors, assessors and installers

Sample design and recruitment

1.24. The quantitative survey asked respondents whether they were willing to be re-contacted for the purposes of further research. Qualitative interviews were undertaken with a purposive sample of these respondents to explore issues in greater depth. The sample for the qualitative interviews was designed to ensure coverage of a range of characteristics, including a mix of advisors, assessors and installers (including SWI and non-SWI installers), as well as businesses/ individuals with a range of business models and views of the GD and ECO programme. Figure 1.4 summarises the characteristics of the achieved sample.

1.25. A sample frame of 170 contacts was selected, and within the sample frame, 30 priority cases were selected for interview. Prospective interviewees from the 30 priority cases were contacted and given an opportunity to opt out of the qualitative research. All prospective interviewees were contacted via either email or telephone at least five times, after which non-respondents were replaced by a substitute from the sample frame with similar characteristics, until this option was exhausted. In total, 28 qualitative interviews were undertaken (it was not possible to complete 30 interviews within the fieldwork period).

Fieldwork and data analysis

1.26. Interviews were conducted by interviewers from ICF International. A pilot took place between 17 to 21 February 2014, and two interviews were undertaken. These two interviews were included in the report's final analysis. Qualitative interviews continued to 25 April 2014. Interviews were recorded and transcribed for analysis within a framework that enabled between-case analysis (i.e. examination of patterns of responses across questions, and whether this varied depending on the characteristics of interviewees).

Figure 1.4: Characteristics of the achieved sample of qualitative interviews

Sample characteristics	Sample categories	Intended sample	Achieved sample (no. interviewed)#
Type of actor	Advisor	7-8	7
	Assessor	7-8	7
	Installer	14-16 (incl. 5-10 SWI installers)	14 (incl. 7 SWI installers)
Date of GD certification	Before February 2013	7-15	8
	March to July 2013	7-15	13
	August to October 2013	7-15	7
Scale of business	Sole trader	5-10	6
	National businesses	3-7	7
Experience of GD and ECO	Had delivered GD assessments/installations	20-25	20
	No intention of working in GD market	3-7	5
	Had delivered assessments/installations for ECO	>20	25
Number of assessments delivered (Advisors and Assessors only)	Delivered up to 50 GD assessments	5-8	5
	Delivered 500 or more GD assessments	5-8	6
Charging a fee for GD assessments (Advisors and Assessors only)	Yes	5-10	7
	No	5-10	5
Providing financial help to customers	Yes	13-17	14
	No	13-17	14
Installers that added new measures to their offer	Yes	5-10	6
Views of certification process	Good or very good	7-15	10
	Very poor	7-15	9
Views of GD assessments tools	Strongly agree (relevant tools) are fit for purpose	7-15	6
	Strongly disagree (relevant tools) are fit for purpose	7-15	8
Views of GD Code of Practice and standards	Strongly agree (relevant standards) are fit for purpose	7-15	8
	Strongly disagree (relevant standards) are fit for purpose	7-15	7
TOTAL			**28**

 # Note: multiple characteristics can be represented by one organisation

Analysis of datasets relating to certified suppliers and GDARs

1.27. DECC provided ICF International with two datasets to support the analysis of the activities of GD suppliers. This consisted of:

- The GD ORB database of all registered GD suppliers, as at October 2014. These data were used to construct the samples for the quantitative survey (see above), and were also analysed in order to provide information about the number of certified suppliers and extent to which suppliers fulfil more than one role within the supply chain (certified advisors, assessors and/or installers). These data are presented in Chapter 2 of this report.
- Data on all GDARs completed up until 31 December, consisting of selected information from the associated Energy Performance Certificates (EPCs) and Occupancy Assessments (OAs). Using these data, the ICF International study team analysed the distribution of GDARs amongst certified GD advisors and assessors. This information was used to check that the results of the survey fitted with market information about the completion of GDARs by GD advisors and assessors (see Chapter 3 of this report for discussion of the distribution of GD assessments).

2. Profile of GD suppliers

This chapter presents a profile of the key characteristics of GD advisors, assessors and installers that collectively form part of the GD and ECO supply chain

Key messages

- Of the businesses/ individuals[14] that were registered as GD suppliers as at the end of October 2013 (when the study team accessed data from GD ORB), installers made up the single largest group by size, followed by advisors. Both these groups were most likely to be registered for a single role (i.e. only registered as installers or advisors). Assessors were the smallest group by number, but 73% of these businesses were also registered as advisors and/or as installers.
- GD advisors included a mixture of self-employed sole traders and individuals that were employed directly by one or more GD assessor organisations (70% of the latter sub-group were employed by just one assessor organisation). Qualitative research with a small sample of advisors indicated that some individuals had chosen to become GD advisors in response to changes over the past few years in the Domestic Energy assessor (DEA) market (e.g. the scrapping of Home Improvement Packs and the extension of the validity of Energy Performance Certificates (EPCs) from three to ten years).
- Over half (58%) of GD assessors were micro-sized businesses (employed under 10 people with an annual turnover of less than £1.6 million)[15]. Over half (55%) of assessors had been established since 2011, and of these, most had been established principally to serve the GD and/or ECO market.
- Almost two thirds (63%) of GD installers were micro-sized businesses. Most GD installers were already in operation when GD was launched, and moved into the market to take advantage of the new opportunities provided. Qualitative research with a small sample of installers found examples of businesses that had become GD installers in order to access ECO funding, and installers that had moved into the GD and ECO market whilst waiting for the Domestic Renewable Heat Incentive (RHI) to start. A few installers in the qualitative research sample noted that it had become a "necessity" to enter the GD supply chain since so many other installers had already done so, whilst one interviewee noted that ECO had had such an impact on their core markets that they felt that they had to participate.

[14] Some GD advisors were employed by assessor organisations and thus have been referred to throughout as 'individuals' rather than businesses (since they were not self-employed sole traders)

[15] Using the EU definition of an SME (http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index_en.htm)

Overview of GD suppliers

2.1. Data from GD ORB indicated that, by the time the research started at the end of October 2013, there were a total of 3,048 certified GD suppliers, consisting of businesses (assessors and installers) and individuals (advisors). As Figure 2.1 shows, some businesses were involved in more than one activity in the GD process:

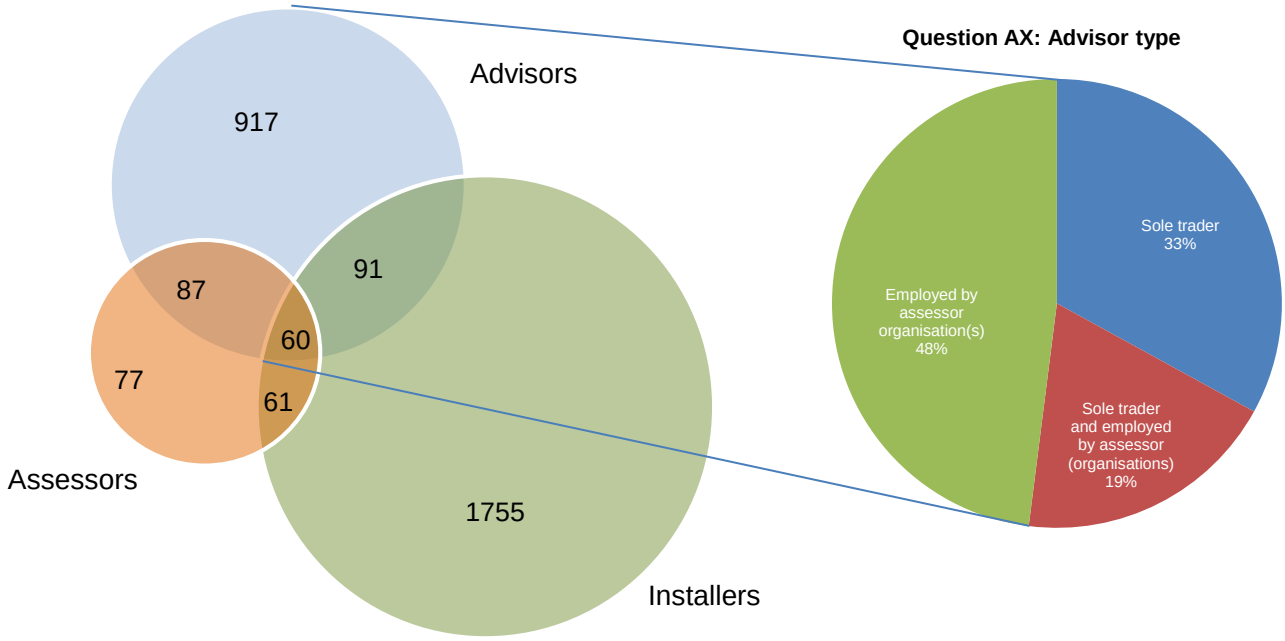
- Installers were the single largest group (1,967 in total, of which 89% were only authorised as installers)
- There were a total of 1,155 registered advisors, of which 79% were only authorised as advisors
- Assessors made up the smallest group (285 in total), of which 27% were only authorised as assessors

2.2. Though not shown in Figure 2.1, a few assessors and installers were also registered as GD providers (3% of the 1,967 installers, and 7% of the 285 assessors).

2.3. Advisors were asked to indicate their 'ownership' position (also shown in Figure 2.1). A third (33%) were self-employed sole traders, whilst 48% were employed directly by a GDAO (the remainder reported that they were both, which could consist of a subcontractor arrangement with one or more GDAOs).

2.4. Of the advisors employed by a GDAO[16], over two thirds (70%) were employed by just one GDAO. Some 12% were employed by two GDAOs, 15% were employed by between three and five GDAOs, and 2% worked for at least six GDAOs.

Figure 2.1: The number of certified GD advisors, assessors and installers (as at the end of October 2013), and the proportion of advisors that were sole traders and/or employed by a GDAO



Source for Venn diagram: GD ORB register of certified GD suppliers; Source for pie chart: survey of GD suppliers; Base: all advisors (184)

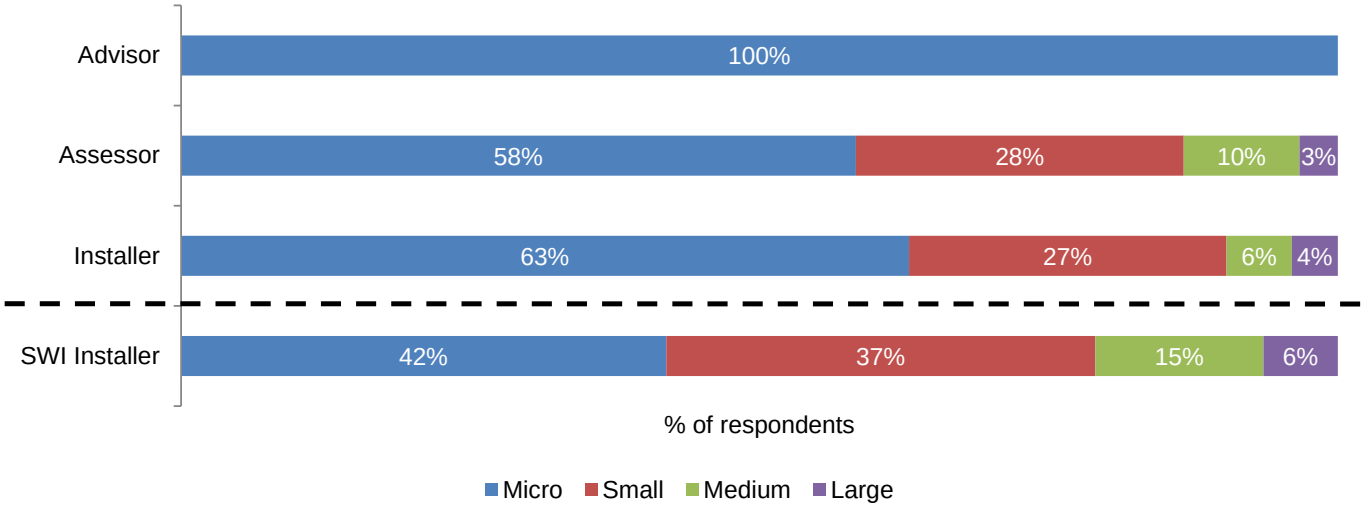
[16] Base: All advisors employed by a GDAO (115)

Size of GD suppliers

2.5. The size of GD suppliers was categorised using a combination of data on employment and annual turnover[17]. As Figure 2.2 shows:

- All advisors (both those that were self-employed sole traders and those employed by assessors) were micro-sized businesses.
- Most assessors were also micro-sized businesses (58% of the total), and all but 3% of the total were micro, small or medium enterprises (SMEs). The median number of employees for an assessor was six people.
- Almost two thirds of installers were micro-sized businesses (63% of the total), and all but 4% of the total were SMEs. The median number of employees for an installer was six people.
- SWI installers were larger businesses than installers as a whole (micro-sized businesses made up 42% of SWI installers compared to 63% of all installers). All but 6% of SWI installers were SMEs.

Figure 2.2: The size of GD suppliers (based on employment and annual turnover)



Base: All respondents – advisors (184), assessors (120), installers (426), SWI installers (151); Note: Size derived from a combination of: A14. How many people, approximately, including yourself are employed by your organisation in Great Britain? A18. What, approximately, was your annual turnover in the last financial year (2012/13)?

[17] Using the EU definition of an SME (http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index_en.htm), where:

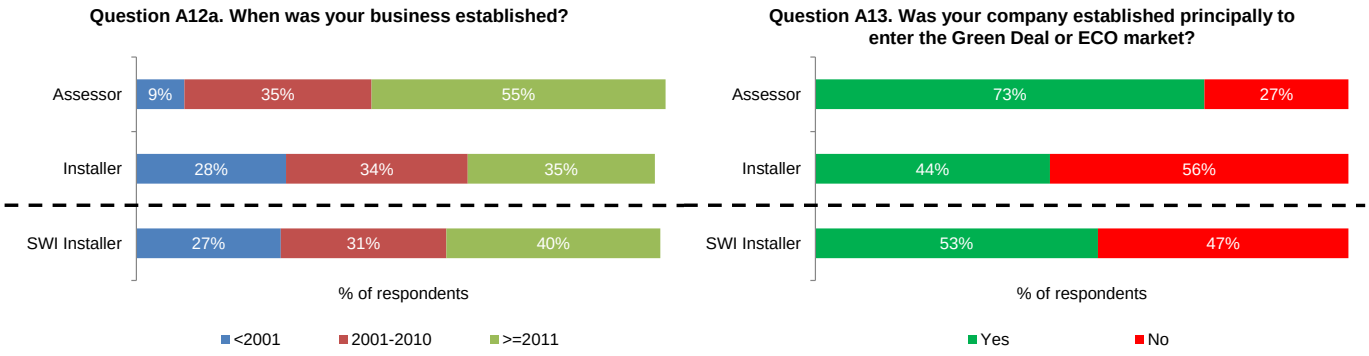
- Micro = <10 employees and turnover ≤£1.6m
- Small = <50 employees and turnover ≤£8m
- Medium = <250 employees and turnover ≤€40m
- Large = ≥250 employees and turnover >€40m

Age and background of GD suppliers

2.6. Figure 2.3 shows the year that assessors and installers were established[18]. The data show that over half of assessors (55%) were businesses that had been established since 2011. Of this sub-group of assessors, 73% were established specifically to enter the GD and/or ECO market. Overall, therefore, 40% of all assessors were established principally to enter the GD and/or ECO market.

2.7. GD installers were a relatively mature 'cohort' of businesses, and just under a third (28%) had been established before 2001. Installers were also significantly less likely than assessors to have been established to serve the GD and/or ECO market, with just 44% of those that had been established since 2011 reporting that this was the driver behind their establishment. Overall, therefore, 15% of all installers were established specifically to deliver GD and/or ECO.

Figure 2.3: Age and reason for establishment of assessors and installers



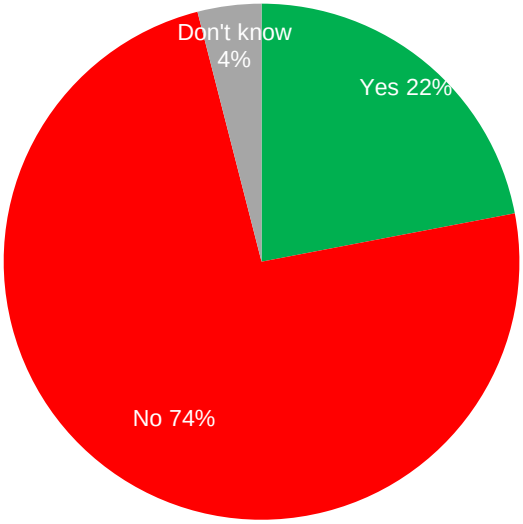
Base A12a: All assessors (120), installers (426), SWI installers (151), note: excludes don't knows (which were all 1%) so does not sum to 100%; Base A13: assessors and installers established after 2011: assessors (66), installers (155), SWI installers (61)

[18] Advisors were not asked these questions and so no analysis has been provided

2.9. Figure 2.4 shows the proportion of installers that indicated that they had delivered under the CERT/ CESP[19] initiatives (which ran up until the end of December 2012) prior to registering as GD suppliers. Most installers (74%) reported that they had not previously been involved with CERT/ CESP[20]. Installers that installed insulation were significantly more likely to have delivered under CERT/ CESP than installers that installed either conventional heating or renewable energy products (53% of insulation installers had delivered under CERT/ CESP, compared to 18% of conventional heating installers and 19% of renewable energy products installers).

Figure 2.4: Whether GD installers had delivered under CERT and/or CESP

Question B5. Were you involved in delivering services under the CERT / CESP programmes?



Base – All installers (426)

[19] The Carbon Emissions Reduction Target (CERT) and the Community Energy Saving Programme (CESP), which finished in December 2012 and were 'precursors' to the ECO programme

[20] Whilst most measures that were eligible under GD and/or ECO were also eligible under the CERT and CESP programmes, there were some differences, meaning that installers that installed measures under GD and/or ECO would not have been able to install these measures under CERT/ CESP (and vice versa). It is thus possible that installers did not participate in CERT/CESP because the measures that they offer were not eligible under CERT/CESP, but the extent to which this was the case amongst GD installers could not be robustly calculated

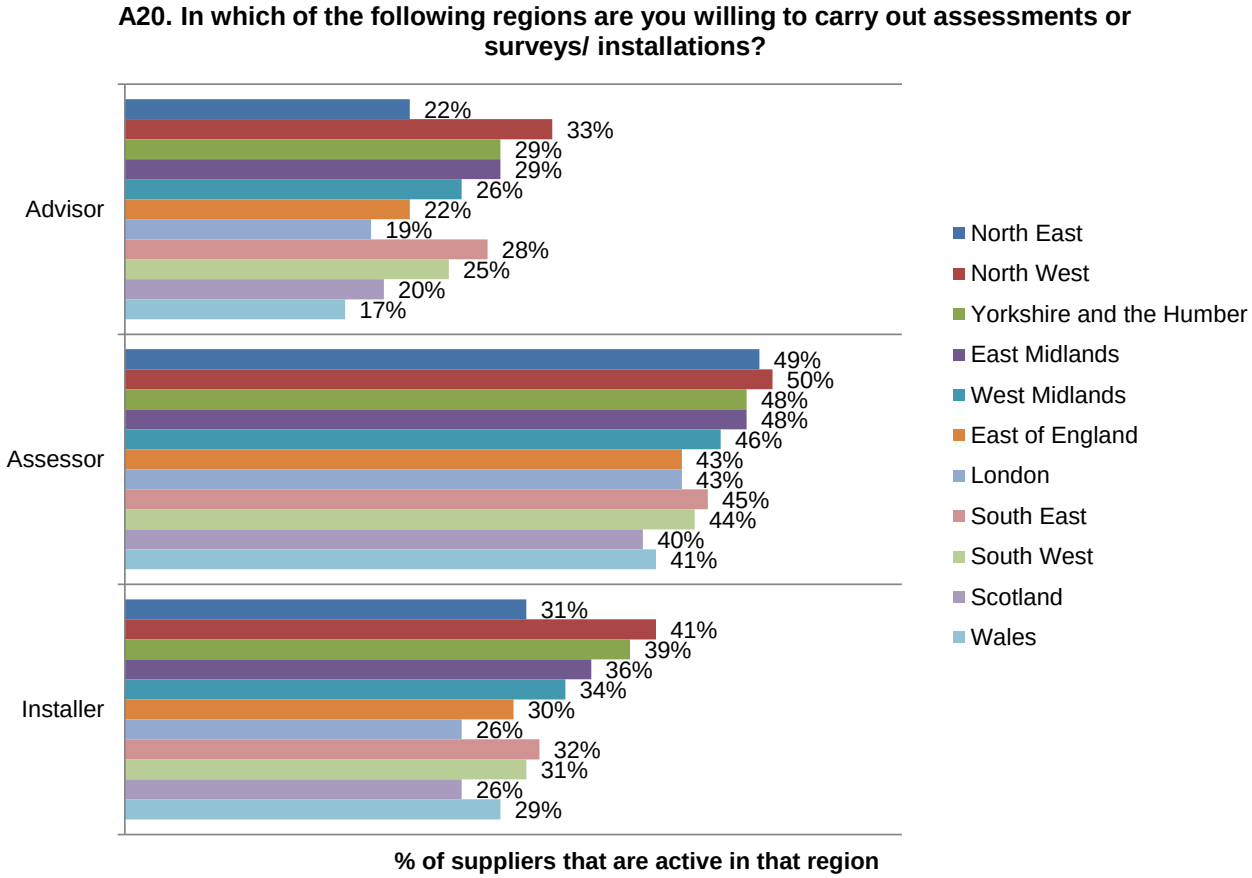
Geographical coverage and scale of GD suppliers

Regional coverage

2.10. Figure 2.5 shows the proportion of suppliers that were active within each region. 'Coverage' was lowest amongst advisors, and ranged from 33% of advisors serving the North West, to 17% of advisors serving Wales. For each region, a higher proportion of assessors served the area than advisors, ranging from between 40% to 50% of assessors.

2.11. Finally, the proportion of installers that were active in a region ranged from 26% to 41%; Scotland and London were the regions with the lowest proportions of active installers (both served by around a quarter of installers).

Figure 2.5: The proportion of GD suppliers that undertake assessments/ installations in regions and devolved administrations of Great Britain

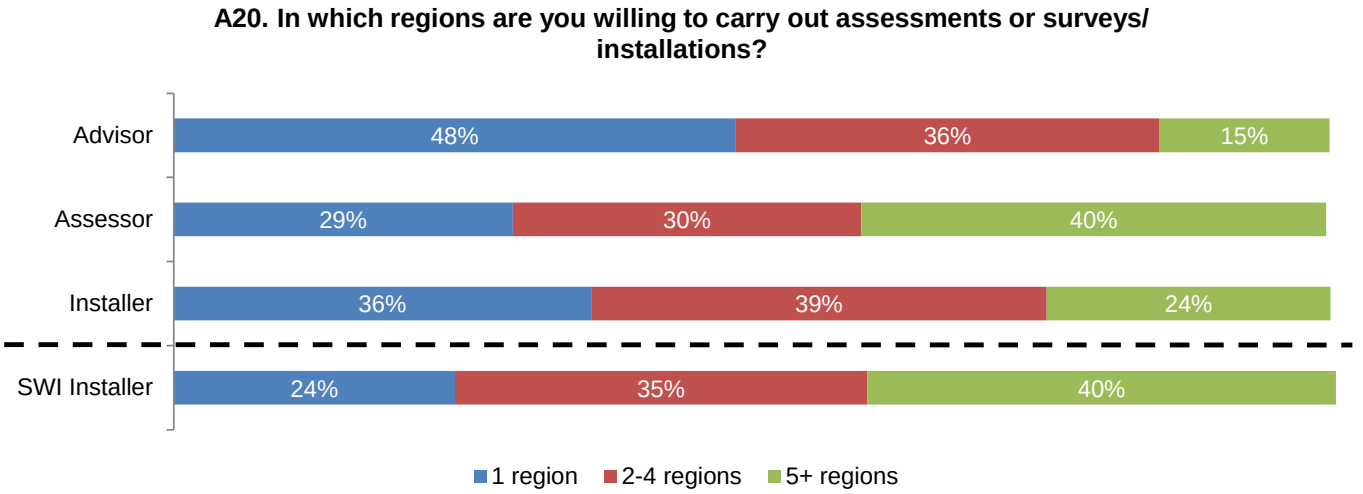


Base: All respondents – advisors (184), assessors (120), installers (426). Note: excludes don't knows (which ranged from 0-1%)

Geographical scale of activity

2.12. Figure 2.6 shows the proportion of GD suppliers that were active within either one region, two to four regions, or at least five regions. Just under half of advisors (48%) were only active within a single region. Assessors, in contrast, covered a wider area, with 40% operating in at least five regions. SWI installers operated at a wider geographical scale than installers as a whole, with 40% active in at least five regions (compared to 24% of all installers).

Figure 2.6: The number of regions that GD suppliers were active within



Base: All respondents – advisors (184), assessors (120), installers (426), SWI installers (151). Note: excludes don't knows (which ranged from 0-1%) so does not sum to 100%

Motivations for becoming GD suppliers

2.13. The qualitative interviews asked respondents about their motivations for becoming certified GD suppliers. Most suppliers mentioned new business opportunities as their prime motivation for entering the market, either through the growth of existing markets or expansion into new areas. For example, one installer wanted to expand into the domestic market: *"We were a commercial electrical contractor and wanted to get into the domestic market"*; while an assessor stated: *"Green Deal rounds off our services. We've set ourselves up as a consultancy where we can offer all different types of energy assessment"*.

2.14. For some others, GD supplier certification was seen as more of a necessity, in order to maintain their presence and position within existing markets. For example, an advisor stated that GD certification has become a requirement for anyone planning to work in the domestic energy assessment market. Similarly, an installer mentioned that *"to survive in the industry you need to go down the PAS2030 and Green Deal route...and like every other installer, we did"*.

2.15. ECO was also a prime motivation for some suppliers, and particularly installers. This was generally a proactive decision based on expected volumes of activity, and/or wanting to help households to reduce their energy bills and address fuel poverty. For example, one assessor stated that *"we wanted to take advantage of the opportunities and particularly to take advantage of ECO to support the more vulnerable and fuel poor households"*. However, an installer reported a more reactive decision taken because of the effect that ECO was having on his core markets *"we had to get on it basically because there was so much work being taken out of the market because of it."* This

installer was a micro-sized business that employed two people, and was focused exclusively on the installation of gas boilers. The installer suggested that the introduction of ECO had *"wiped out half the* [wider] *market"* for gas boilers.

2.16. A few suppliers stated that they had been influenced by the government's renewable heat policies and wanted to be able to offer these services in addition to GD and ECO. One supplier (a certified GD advisor and installer) already had a list of 40 to 50 customers waiting for the Domestic Renewable Heat Incentive (RHI) to commence Another installer had started up two years ago in order to be ready for the launch of the RHI, but when that was delayed, they became certified as a GD installer to enter the ECO market in a *"crisis management"* move. Other motivations included a response to a decline in income generated through alternative markets. This included cuts the scale of Feed-in-Tariffs (which affected installers operating in the Solar PV market), and the 2010 abolition of Home Information Packs (HIPs) and extension of the validity of Energy Performance Certificates (EPCs) from three to ten years (which affected Domestic Energy assessors – DEAs).

3. Delivery and demand under GD and ECO

This chapter explores patterns of delivery under GD and/or ECO, and considers GD suppliers' views on demand to date under GD and ECO, and how they expect this to change in the future

Key messages

- Most advisors and assessors (65% and 83% respectively) had delivered GD assessments at the point of interview (January/ February 2014); where they had not, most were planning to do so in the future. The majority of advisors and assessors (66% and 75% respectively) had delivered GD assessments as part of the ECO programme. Most advisors and assessors were delivering GD assessments under both GD and ECO (57% and 70% respectively).
- The distribution of GD assessments amongst advisors and assessors was highly skewed, with 20% of advisors and assessors in the sample responsible for a large proportion of the completed GD assessments in the sample (69% and 83%, respectively). Amongst those advisors and assessors that had delivered GD assessments, most had completed very few assessments. A quarter of advisors that had carried out GD assessments had completed ten or fewer, and a quarter of assessors that had carried out GD assessments had completed 20 or fewer. The median average number of GD assessments amongst advisors and assessors that had carried out assessments was 50 and 120 respectively.
- Only a minority (16%) of GD installers had installed measures under GD, with a lack of demand under GD most commonly cited as the reason why this was the case. Most GD installers (75%) were delivering under the ECO programme. Only a small proportion of installers (14%) were delivering installations under both GD and ECO.
- The GD/ ECO installation market was also highly skewed, with 20% of installers in the sample accounting for 92% of the installations that had been completed under GD/ ECO in the sample (as at January/ February 2014). Amongst those installers that had carried out installations under GD/ ECO, a quarter had carried out 20 or fewer installations, and the median average was 70 installations per installer.
- GD assessors were the most likely of all types of GD supplier to rely on GD and/or ECO for all of their income (24% of assessors generated all of their turnover from the GD and/or ECO programme). Just under half of advisors and installers (45% and 44% respectively) generated less than 10% of their income from GD and/or ECO.
- Majorities of each type of GD supplier reported that their levels of assessment and installation activity under GD and ECO (particularly GD) had been lower than they had initially expected. Views were mixed on whether demand for assessments and installations under GD and ECO would increase in the near future. Between a

third and a half of each type of GD supplier believed that demand under GD would increase over the next six months. Expectations were slightly lower in respect of ECO, with between a quarter and a third of each type of GD supplier expecting demand to grow.

- Relatedly, views amongst interviewees were mixed as to the effect that the 2013 Autumn Statement[21] would have on demand under ECO. Between 29% and 42% of advisors, assessors and installers reported that they expected demand to decrease. Over half of SWI installers (56%) believed that the proposed changes to ECO would result in a decrease in demand for ECO installations.
- Qualitative interviews with a sample of GD suppliers found mixed views on the impact of GD cashback on demand under GD and ECO. For some interviewees, cashback had attracted customers by providing a monetary incentive to proceed with an installation. Other interviewees argued that the cashback value had initially been set too low to have a major impact on demand. The increased cashback rates offered after December 2013 were seen by some interviewees to be an improvement, which was expected to generate additional demand (particularly for solid wall insulation).

[21] Shortly before fieldwork commenced, the Chancellor's 2013 Autumn Statement set out a number of proposed changes to the ECO programme. At the time of fieldwork, these changes included:

- A reduction in the scale of the CERO target, which would primarily affect targets for the delivery of solid wall insulation and/or hard-to-treat cavity wall insulation
- An extension of the targets under CSCO and Affordable Warmth through till 2017

Delivery under GD and/or ECO

3.1. As Figure 3.1 shows, most assessors (83%) and advisors (65%) had delivered GD assessments. Where they had not, they were typically planning to do so in the future (another 24% of advisors, and 12% of assessors).

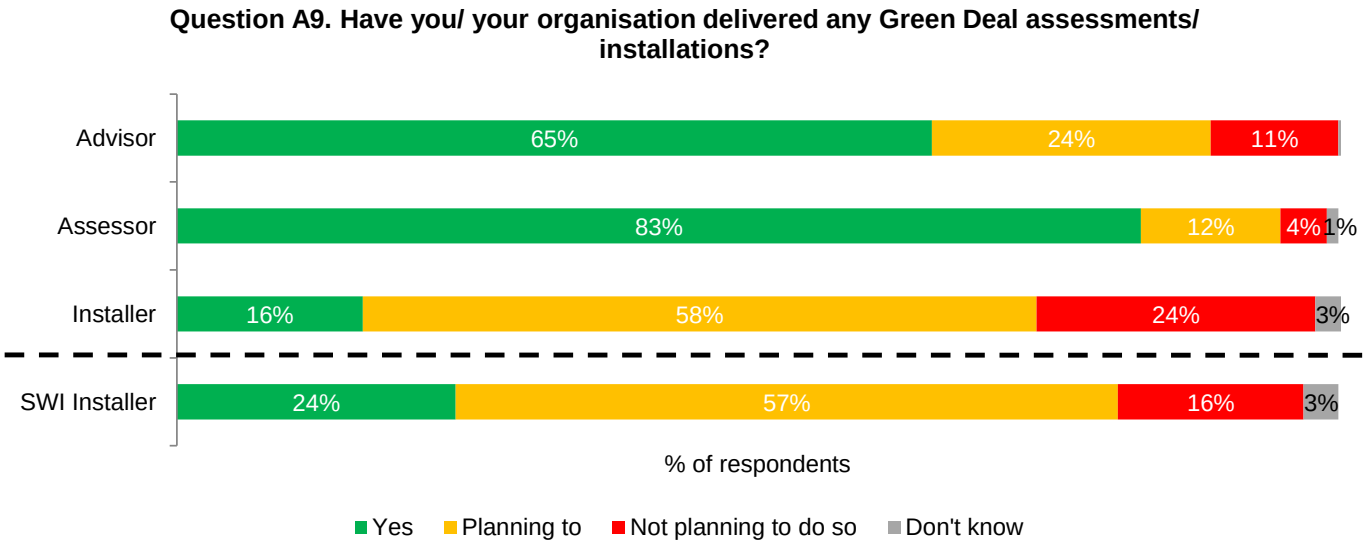
3.2. Amongst installers, a minority (16%) reported that they had installed measures under GD. Over half of installers (58%) were planning to deliver under GD, which suggests an expectation that demand would pick up in the future (see below for further discussion of demand under GD). SWI installers were significantly more likely than installers as a whole to have installed measures under GD (24% compared to 16%).

3.3. Around a quarter (24%) of installers had no intention of installing measures under GD (this despite having completed the registration process). Installers that only installed a single measure (see Section 6 for more details) were significantly more likely than those that installed multiple measures to indicate that they had no intention of delivering under GD (31% of single measure installers, compared to 19% of multiple measure installers).

3.4. Those installers[22] that had not installed measures under GD and were not planning to[23] gave the following explanations for this was the case:

- A third (33%) of this installer sub-group cited a lack of demand amongst consumers – the single most commonly selected reason
- Some 13% of this installer sub-group were instead focussing on delivery under ECO (see below)
- Another 16% of this installer sub-group saw the 'complexity' of the GD as the reason why they had not installed any measures under the scheme

Figure 3.1: The proportion of GD suppliers that had delivered under GD



Base: All respondents – advisors (184), assessors (120), installers (426), SWI installers (151)

[22] Small base sizes (n<20) means that it has not been possible to analyse responses of advisors or assessors

[23] Base: Installers that were not planning to install measures under GD (92)

Delivery to date under ECO

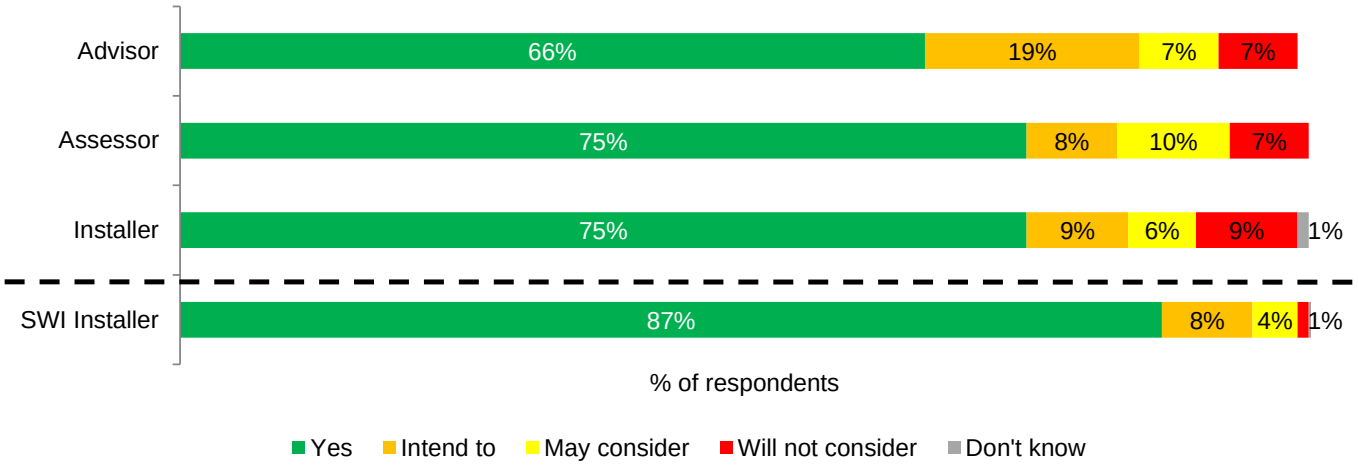
3.5. As Figure 3.2 shows, most advisors and assessors had carried out GD assessments under ECO. There were no significant differences in levels of ECO participation depending on the size or background of advisors or assessors.

3.6. For installers, delivery under ECO was more common than delivery under GD. Three quarters (75%) of GD installers had installed measures under the ECO programme (whereas just 16% had installed measures under GD). Just 9% of installers indicated that they would not consider delivering under ECO. SWI installers were significantly more likely than installers as a whole to have installed measures under ECO (87% compared to 75%).

3.7. Larger installers were significantly more likely to have delivered under ECO than smaller installers, with 70% of micro-sized businesses reporting that they had installed measures under ECO, compared to 83% of medium- and large-sized businesses. Similarly, installers with a history of delivery under CERT/ CESP were significantly more likely than those without such a history to have installed measures under ECO (94% compared to 71%). The correlation between these subgroups should be noted, with larger installers more likely to have a history of delivering under CERT/CESP than smaller installers.

Figure 3.2: The proportion of GD suppliers that had delivered under ECO

Question A11. Have you/ your organisation delivered any GD assessments under ECO, or installed measures under ECO?



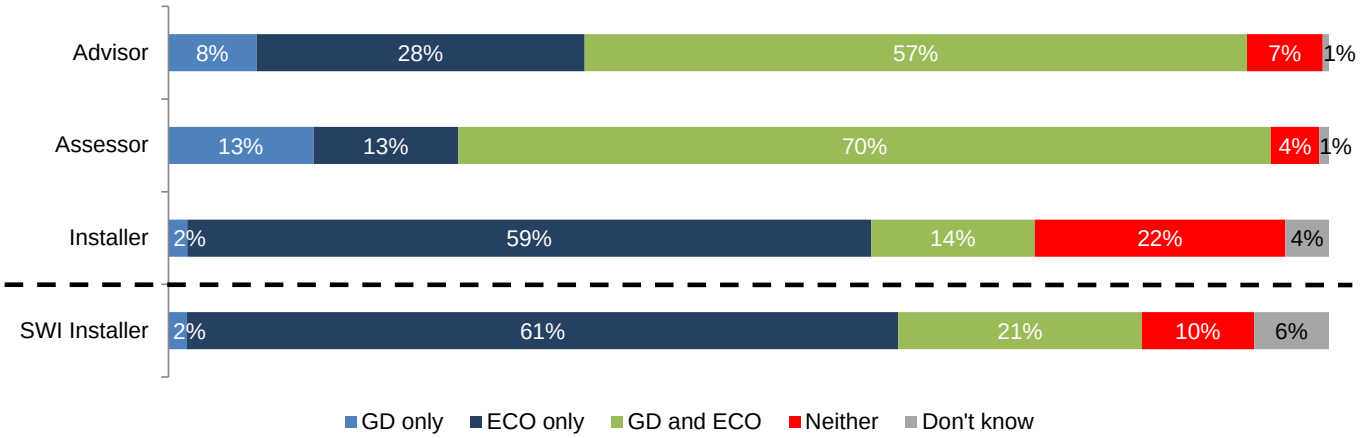
Base: All except advisors/assessors not planning to deliver Green Deal – advisors (168), assessors (115), installers (426), SWI installers (151)

Delivery under both GD and ECO

3.8. As shown in Figure 3.3, most advisors and assessors were delivering GD assessments under both GD and ECO (57% of advisors and 70% of assessors worked under both 'strands' of the programme). Relatively few advisors or assessors were only delivering assessments under GD (8% and 13% of the respective totals).

3.9. Over half of installers (59% of the total) were only delivering under ECO, and just 14% were working under both strands of the GD and ECO programme. This again highlights the relative importance of ECO to installers. Around a quarter of installers (22%) were not delivering under GD or ECO.

Figure 3.3: The proportion of GD suppliers that had delivered GD assessments or installations under the GD and/or ECO programme



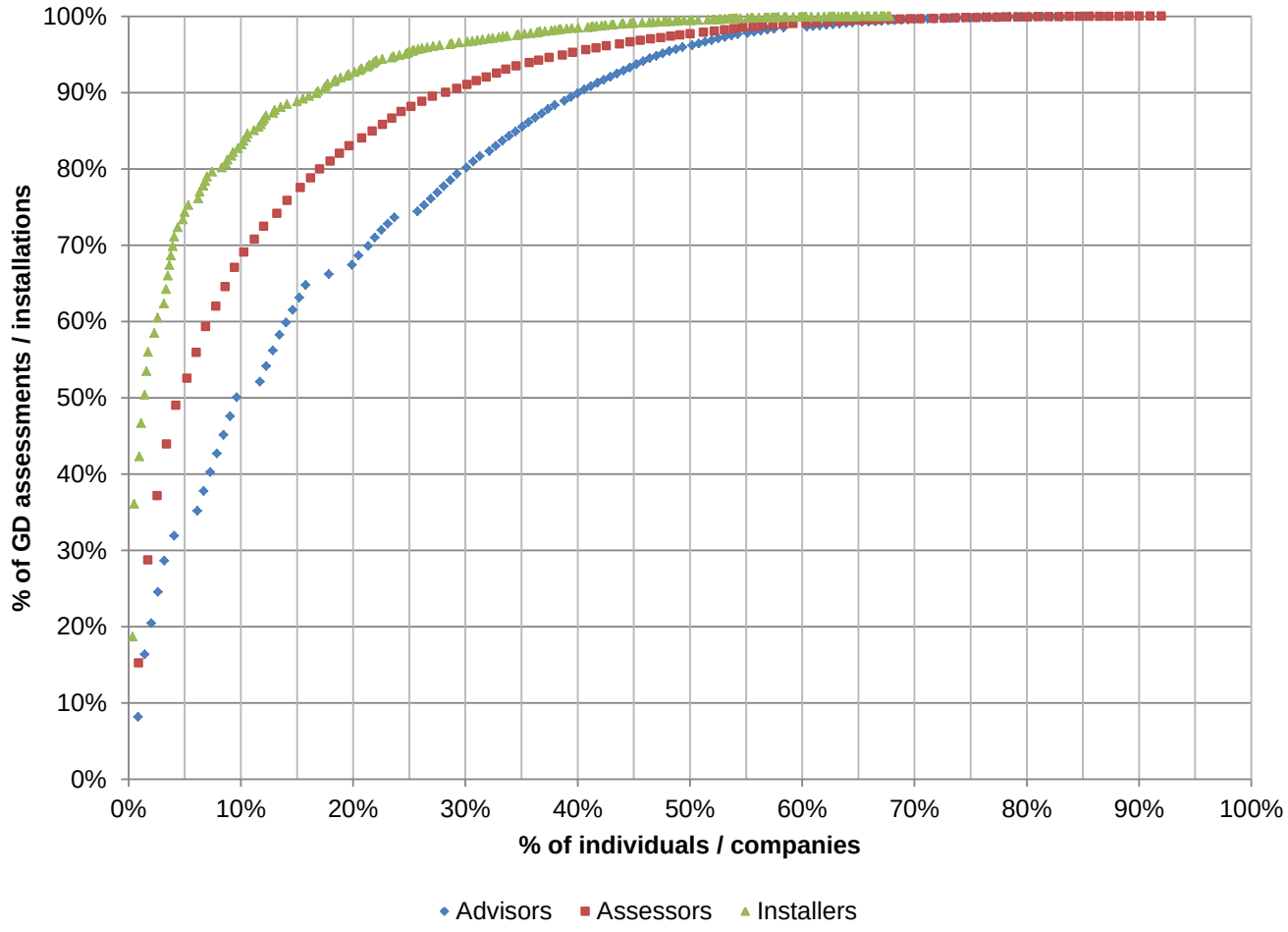
Base: All respondents – advisors (184), assessors (120), installers (426), SWI installers (151); note: derived from a combination of A9 Have you delivered any GD assessments/ installations? and A11 Have you delivered any GD assessments under ECO or have you installed measures under ECO?

Number of assessments/ installations delivered under GD/ ECO

3.10. Figure 3.4 shows – *for the survey sample*[24] – the cumulative percentage share of all GD assessments delivered by GD advisors and assessors, and the cumulative percentage share of all GD/ ECO installations delivered by installers.

3.11. The data show how skewed the GD assessment and GD/ ECO installation market is, with a small number of certified GD advisors, assessors and installers responsible for large numbers of assessments and installations, and a long 'tail' of individuals and businesses that have undertaken very few assessments and installations under the GD and ECO programme. For example, 20% of advisors in the sample had completed 69% of GD assessments in the sample, 20% of assessors in the sample had completed 83% of GD assessments in the sample, and 20% of installers in the sample had completed 92% of GD/ ECO installations in the sample.

Figure 3.4: From the survey, the cumulative share of GD assessments and installations delivered under GD and/or ECO by the advisors, assessors and installers in the survey sample



Base: All delivering GD assessments/ installations – advisors (145), assessors (107), installers (276); note: don't know and refused answers have been omitted (and ranged from 8% to 32% - see Figures 3.5 to 3.7 for details); note Figure 3.4 does not include advisors, assessors or installers who stated they had not

[24] Note that this is just the survey sample, not the total population of certified GD advisors, assessors and installers. As a check, this was compared to the administrative data held by DECC on the GDARs that were completed in 2013, which showed a similar – if not greater – skew, with two businesses responsible for around 50% of all GD assessments completed in 2013.

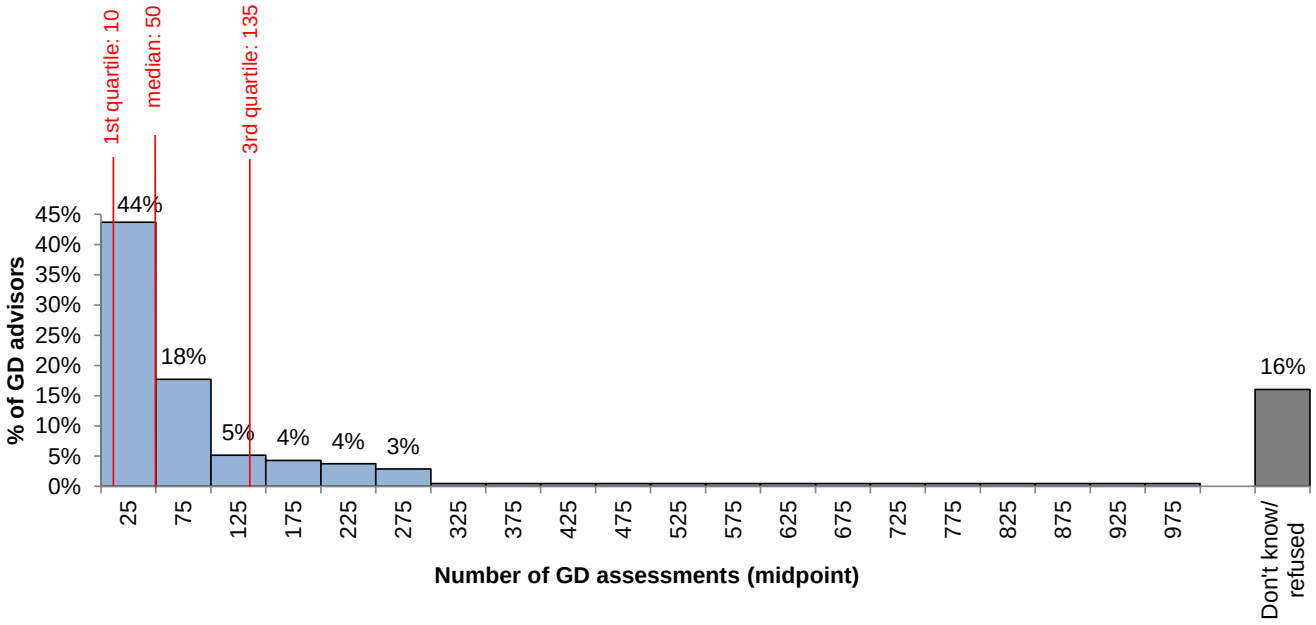
completed any assessments. If these businesses had been included, the figure would be more skewed in the same direction.

The number of GD assessments carried out by GD advisors

3.12. Figure 3.5 consists of a histogram showing the number of GD assessments carried out by advisors that had delivered GD assessments (as at January/ February 2014). Note that this includes GD assessments carried out under the ECO programme.

3.13. The data confirm the skew in the distribution of GD assessments between advisors. The number of assessments completed by advisors ranged from one through to 1000. A quarter of advisors had completed ten or fewer assessments, and three quarters had carried out under 135 assessments. Advisors had carried out a median average of 50 GD assessments per advisor.

Figure 3.5: Histogram showing the number of GD assessments carried out by GD advisors (as at January/ February 2014)



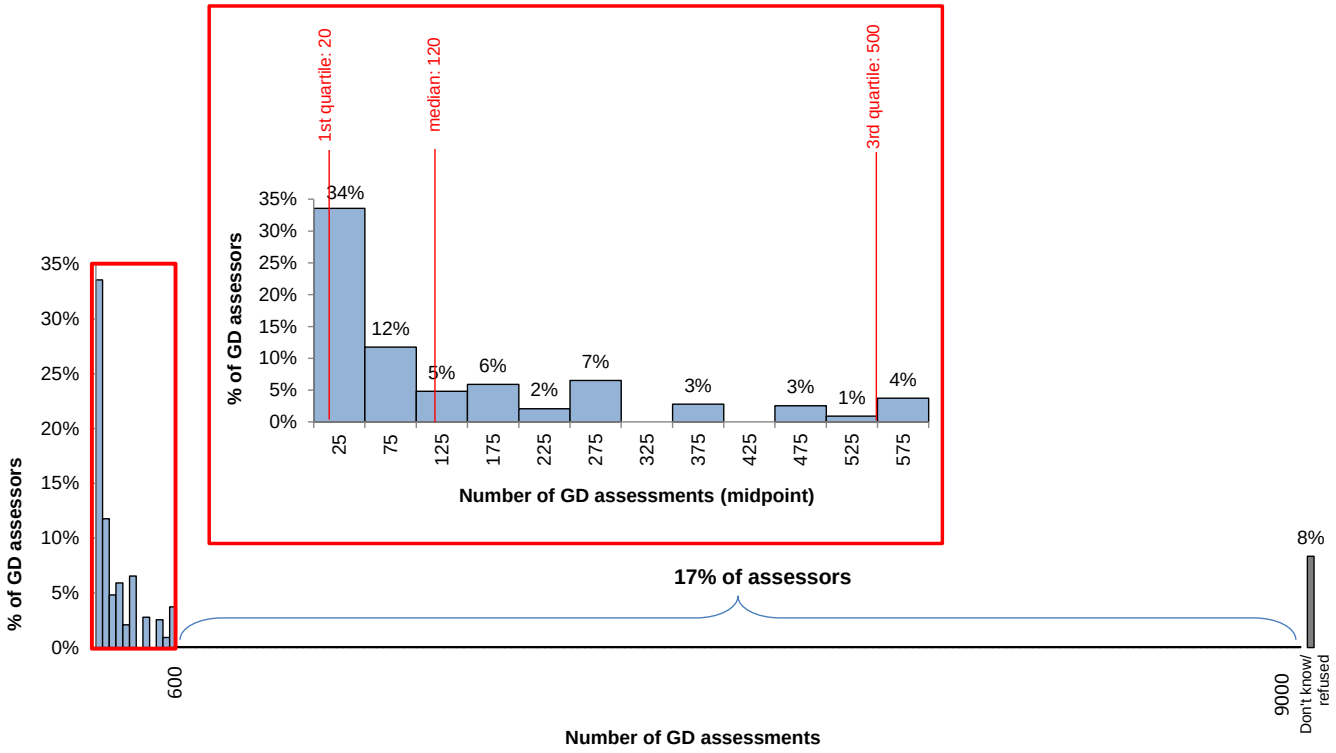
Base: All advisors delivering GD assessments (145); note: based on responses to Question C4. How many GD assessments have you completed as part of the GD and ECO programme, and excludes advisors who indicated that they had not delivered any GD assessments

The number of GD assessments carried out by GD assessors

3.14. Figure 3.6 consists of a histogram showing the number of GD assessments carried out by assessors that had delivered GD assessments, as at January/ February 2014. Note that this includes GD assessments carried out under the ECO programme.

3.15. Again, there is evidence of a high degree of skew in the distribution of assessments. The number of assessments completed per assessor ranged from one through to 9000. A quarter of assessors reported that they had completed 20 or fewer GD assessments, and three quarters reported that they had completed 500 or fewer assessments. assessors had carried out a median average of 120 GD assessments per assessor.

Figure 3.6: Histogram showing the number of GD assessments carried out by GD assessors (as at January/ February 2014)



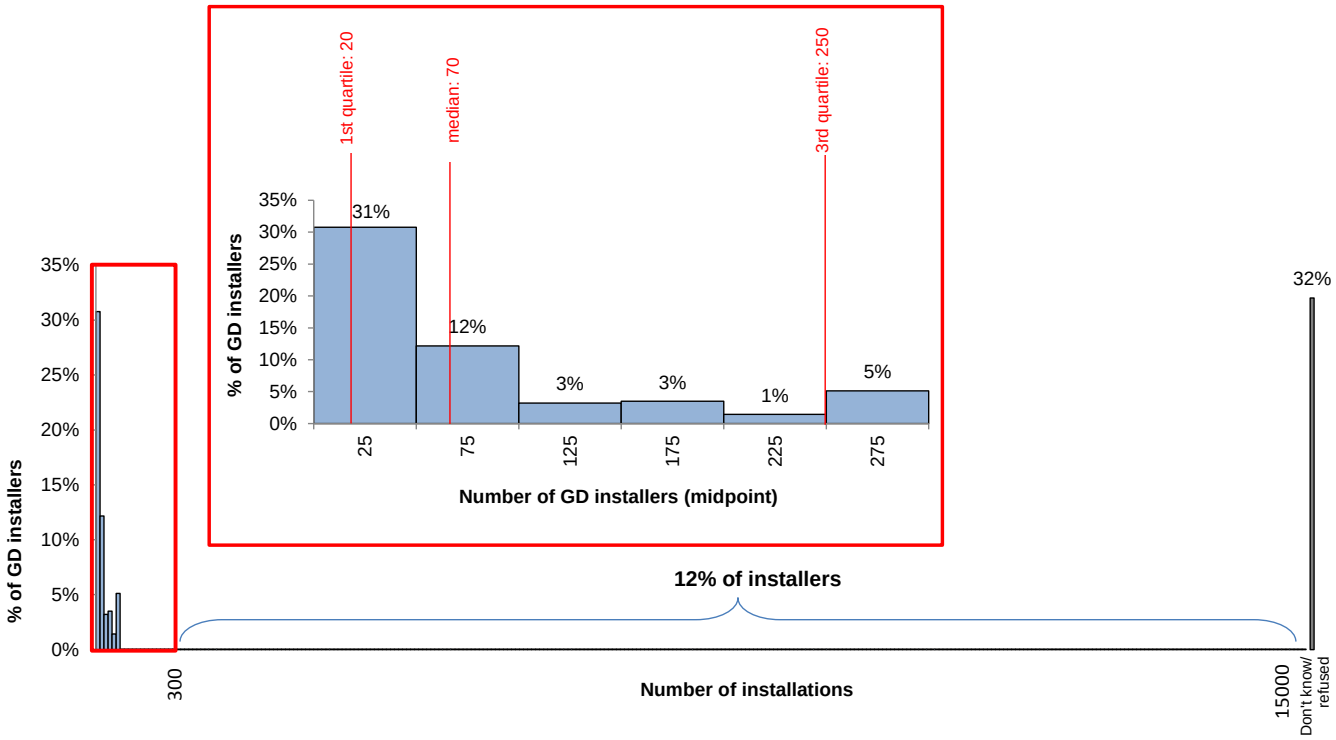
Base: All assessors delivering GD assessments (107); note: based on responses to Question C4. How many GD assessments have you completed as part of the GD and ECO programme, and excludes assessors who indicated that they had not delivered any GD assessments

The number of GD/ECO installations carried out by GD installers

3.16. Figure 3.7 consists of a histogram showing the number of GD/ ECO installations carried out by installers that had delivered installations, as at January/ February 2014.

3.17. As Figure 3.7 shows, the GD/ECO installation market was highly skewed. The number of installations completed per installer ranged from one through to 15,000. A quarter of installers had carried out 20 or fewer GD and/or ECO installations, and three quarters had carried out under 250 GD and/or ECO installations. The median average per installer was 70 GD and/or ECO installations.

Figure 3.7: Histogram showing the number of installations carried out by GD installers under GD/ECO (as at January/ February 2014)



Base: All installers delivering GD installations and/or installations under ECO (276); note: based on responses to Question C4. How many installations have you completed as part of the GD and ECO programme, and excludes installers who indicated that they had not delivered any GD/ECO installations

Generation of income through GD and/or ECO

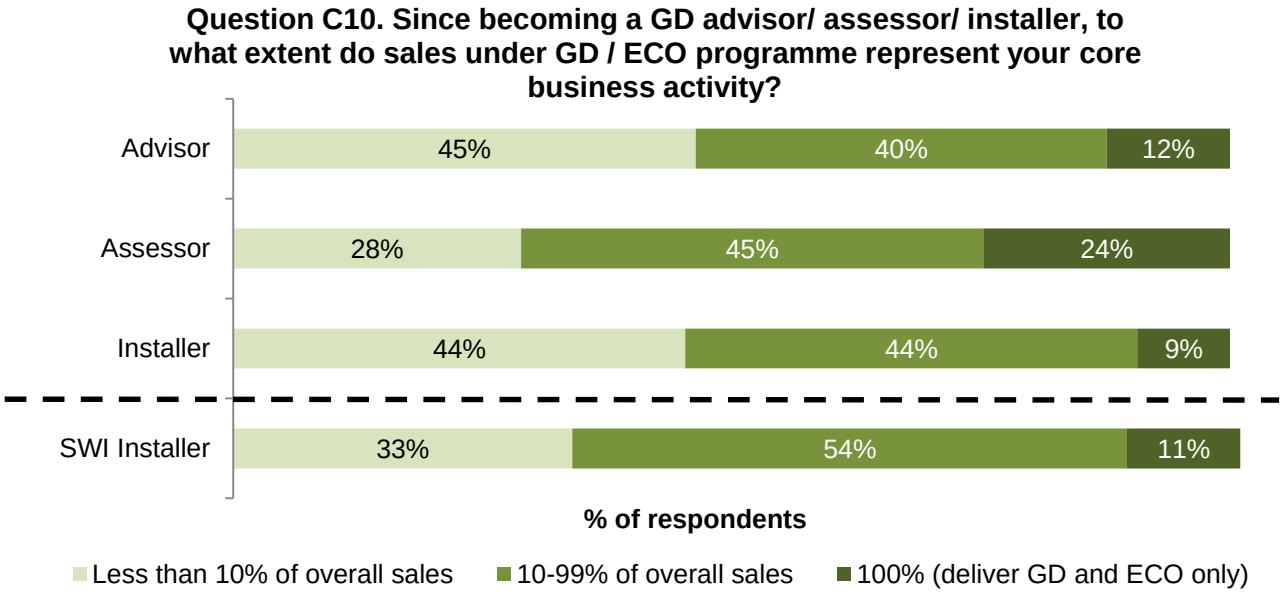
3.18. Those advisors, assessors and installers that were delivering or planning to deliver under GD and/or ECO were asked to estimate their GD/ ECO sales as a proportion of their overall turnover (Figure 3.8).

3.19. Assessors were significantly more likely than other types of supplier to focus solely on delivering GD and/or ECO, with a quarter of assessors (24%) reported that they had generated all of their income through the GD and/or ECO programme. In contrast, under half of advisors and installers (45% and 44% respectively) generated less than 10% of their annual sales from the GD and/or ECO programme. SWI installers were significantly more likely than installers as a whole to generate between 10-99% of their income from GD and/or ECO (54% compared to 44% of all installers).

3.20. Assessor and installer businesses that were established in response to the GD and ECO programme were more likely than businesses that pre-dated the launch of the

programme to rely on GD and/or ECO for all of their annual income. Some 41% of assessors and 33% of installers that reported that they had started up to serve the GD and ECO programme drew all of their income from GD and/or ECO, compared to 8% of assessors and 4% of installers that were set up before 2011.

Figure 3.8: The proportion of suppliers' annual sales that are derived from GD and/or ECO



Base: Respondents delivering or planning to deliver GD and/or ECO – advisors (181), assessors (117), installers (402), SWI installers (147); Note: excludes don't knows (which ranged from 3-4%) so does not sum to 100%

Demand under GD and/or ECO

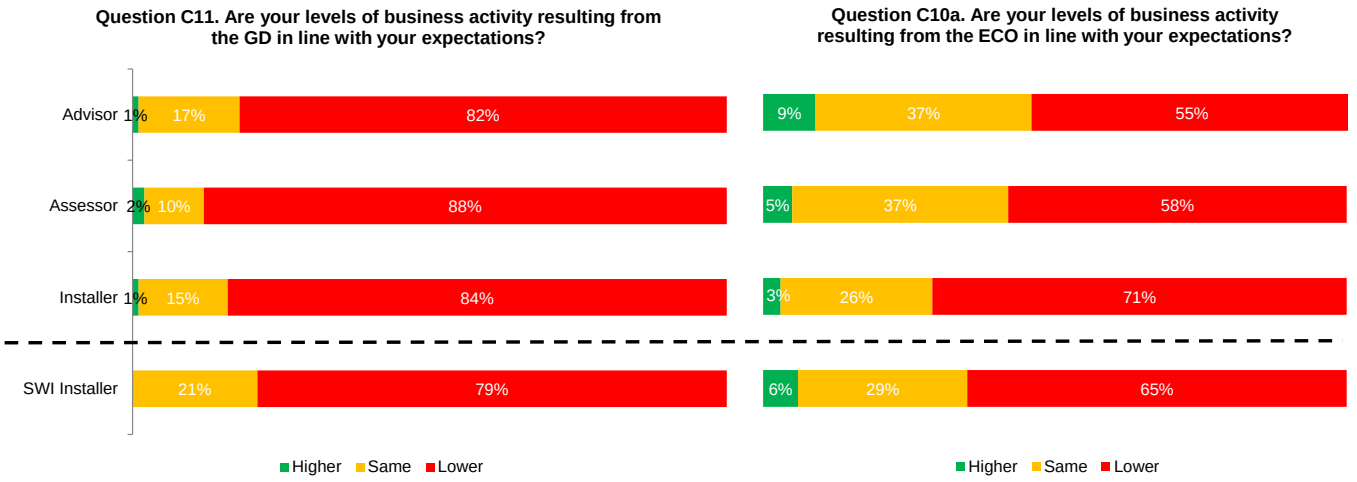
Comparison of current levels of activity under GD and ECO against expectations

3.21. GD suppliers were asked to compare their current levels of activity under GD and ECO with their initial expectations of the programme (Figure 3.9).

3.22. In relation to GD (the left of the two charts in Figure 3.9), levels of activity had been lower than expected for the majority of GD suppliers. Between 79% to 88% of each type of GD supplier reported that delivery under GD had been lower than they had anticipated. Most of the remaining 10% to 20% reported that levels of activity had been in line with their expectations.

3.23. In relation to ECO (the right of the two charts in Figure 3.9), the majority of all types of supplier reported that delivery had been lower than they had initially expected (between 55% to 71% of each type of GD supplier). Advisors that were sole traders were more likely than those that were directly employed by a GDAO to report that levels of delivery under ECO had been lower than expected (66% of sole traders, compared to 48% of advisors that were employed by a GDAO).

Figure 3.9: How current levels of GD and/or ECO activity compared to expectations



Base: C11 – All delivering or planning to deliver under GD – advisors (167), assessors (114), installers (323), SWI installers (122); C10a All delivering or planning to deliver under ECO – advisors (166), assessors (104), installers (369), SWI installers (142);

3.24. Qualitative interviews explored suppliers' experiences of demand under GD and ECO. Interviewees identified two main reasons as to why they thought that demand had been lower than they had initially expected:

- A lack of awareness of GD amongst consumers. For example, one advisor stated that "[Green Deal] *still hasn't taken off. The average man on the street doesn't know about Green Deal.*"
- Issues with GD finance, specifically a lack of demand for a loan linked to customers' homes and/or the interest rate associated with GD finance (which was described by one interviewee as *"unattractive to customers"*). In the experience of one installer, *"about ten people were interested and did get their paperwork done but when they realised that they would have had a loan on their house they withdrew, saying 'they would rather go to the bank'."* Similarly, another installer stated that *"people don't*

want to put the loan on the property, especially with a 7% interest rate. People end up doing improvements using a bank loan because the rates are cheaper."

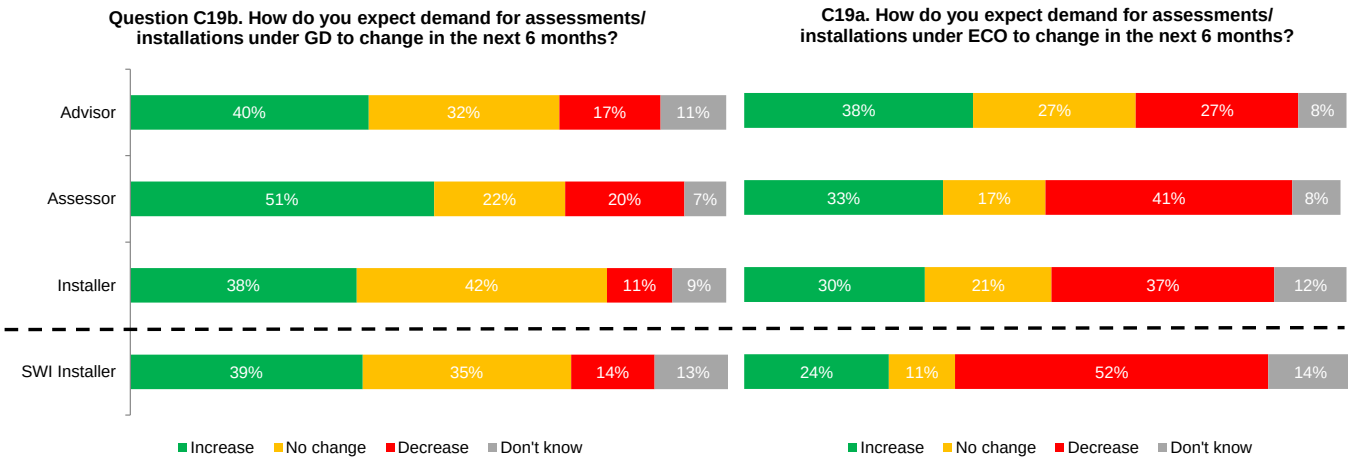
Expectations for future levels of demand under the GD and ECO programme

3.25. As Figure 3.10 shows, GD suppliers had mixed views about the likely direction of change of demand under the GD and ECO programme over the next six months (i.e. through to late summer 2014). Between 7% and 14% of each type of GD supplier indicated that they 'didn't know' how demand under would change under GD and ECO, which suggests that there was some uncertainty about market performance.

3.26. In relation to GD (the left of the two charts in Figure 3.10), between 38% and 51% of each type of GD supplier believed that demand for assessments and installations would increase over the next six months. Assessors were more likely than other types of supplier to predict an increase in demand (in this case for GD assessments), with 51% expecting growth over the next six months.

3.27. In relation to ECO (the right of the two charts in Figure 3.10), a smaller proportion of GD suppliers expected demand to increase over the next six months (between 24% and 38% of each type of supplier). Similar proportions of suppliers expected demand to decrease (between 27% and 52% of each type of supplier). SWI installers were significantly more likely than installers as a whole to predict a decrease in demand under ECO (52% of SWI installers thought that demand would drop in the next six months).

Figure 3.10: Expectations for future demand under the GD and ECO programme



Base: C19b – All delivering or planning to deliver under GD – advisors (167), assessors (114), installers (323), SWI installers (122); C19a All delivering or planning to deliver under ECO – advisors (166), assessors (104), installers (369), SWI installers (142)

The effects on demand of the proposed changes to ECO

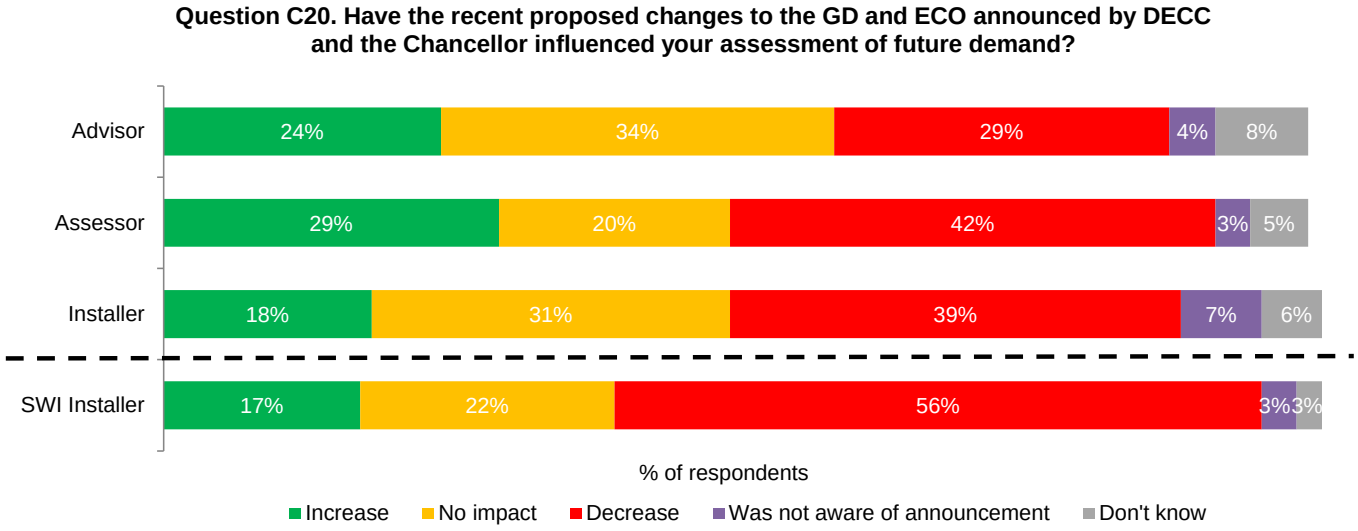
3.28. Shortly before fieldwork commenced (in January/ February 2014), the Chancellor's 2013 Autumn Statement set out a number of proposed changes to the ECO programme. *At the time of fieldwork*, these proposed changes included a reduction in the scale of the target under CERO (which would primarily affect targets for the delivery of SWI and/or hard-to-treat CWI), and an extension of the targets under CSCO and Affordable Warmth through till 2017.

3.29. GD suppliers were asked to report their views of the impacts that these proposed changes might have on future levels of demand under ECO (Figure 3.11). Views were mixed, though for assessors and installers the most common view was that the changes

would lead to a decrease in demand (selected by 42% and 39% of assessors and installers respectively).

3.30. SWI installers were significantly more likely to report that the proposed changes to ECO would lead to a decrease in demand (56% of SWI installers, compared to 39% of all installers). A large SWI installer that was interviewed as part of the qualitative research reported that they had already seen significant impacts from the changes to the CERO targets (*"we had a pipeline of over £100 million of SWI projects, which has now disappeared. So the impacts on our business have been significant")*. This installer expected that some of these SWI projects would still go ahead, and the proposed increase to GD cashback for SWI would help to some extent, but they expected that most of this income would be lost because of the proposed changes to CERO targets.

Figure 3.11: Expectations of the impact of proposed changes to ECO



Base: All respondents – advisors (184), assessors (120), installers (426), SWI installers (151)

The effects of cashback on demand

3.31. Qualitative interviews asked suppliers about the effects of the GD cashback scheme on demand for GD and ECO. The GD cashback scheme allows households to claim money for measures that they have had installed following a GD assessment. Changes to the rates offered under the cashback scheme were announced in February 2014, increasing the amount offered for certain measures.[25] Since this change was announced part way through the fieldwork for this study, it was not discussed in all qualitative interviews.

3.32. Many GD suppliers felt that the GD cashback scheme had raised demand for GD. For example, one assessor was using cashback to attract customers and was sending out marketing materials introducing and explaining cashback to everyone who had enquired about GD assessments. They felt that there was a lot of interest in GD cashback, which "*helps to soften the blow of the assessment fee and means customers can effectively recoup that initial outlay if they go ahead with an installation*". An installer commented

[25] Changes to the rates offered under the cashback scheme increased cashback amounts for some measures, such as room in roof insulation increase from £220 to £1,000. Full details are available here: https://gdcashback.decc.gov.uk/

that the cashback incentive was becoming "*increasingly popular*" among customers and was proving a "*big success*".

3.33. Other interviewees felt that the impact of cashback on demand had been more limited, since it had only provided an incentive for a minority of customers. For example, one installer noted that "*cashback is really good… but I haven't got a great deal of work out of it*", while an assessor reported that "*most people aren't asking about it*" (though they were still applying for it on behalf of all eligible customers).

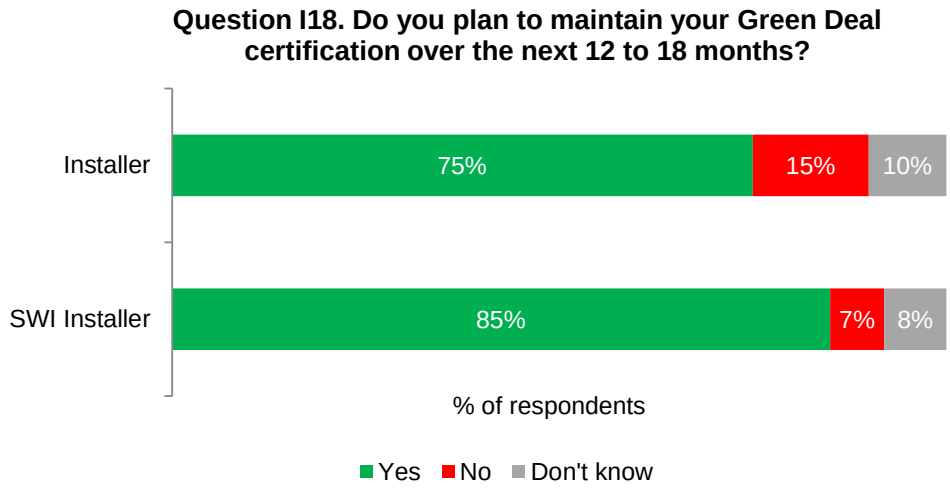
3.34. Many interviewees were less positive about the GD cashback scheme, suggesting that cashback, particularly the cashback offered prior to the December 2013 revisions, had been "*too low to be really effective*". Other interviewees were concerned that cashback would only run for a limited period, and would not be sufficient to generate a sustained increase in demand for GD: "*cashback is only going to run for a few months…and then the industry is back to square one*".

3.35. Interviewees were generally more positive about the cashback rates that were offered after December 2013, particularly the rates offered for SWI installations, which was described by some as "*a fantastic scheme*" and "*a particularly good offer*".

Future intentions of installers

3.36. Installers were asked whether they intended to maintain their certification over the next 12-18 months, which gives an indication of whether they intended to remain in the GD market (Figure 3.12). The majority of installers did intend to retain their certification (75% of all installers), though some 15% of installers reported that they did not. SWI installers were significantly more likely to report that they intended to maintain their GD certification (85% of SWI installers compared to 75% of installers as a whole).

Figure 3.12: Whether installers intended to maintain their GD installer certification over the next 12-18 months



Base: All installers – installers (426), SWI installers (151)

3.37. Qualitative research included interviews with installers that were not intending to maintain their certification, or were not decided. Their reasons included the following:

- *A lack of demand under GD and ECO.* Where demand under GD and ECO had not met expectations, a few interviewees were considering not renewing their certification. For example, one installer of SWI noted that demand outside of GD and ECO meant that there was enough work available without a need to meet

certification costs. This interviewee noted that they had found that customers had considered paying for installations via GD, but had ended up *"paying cash instead"*

- *The costs of renewing certification*. Interviewees cited the cost of renewing their certification as a 'deterrent', especially given the lack of sufficient income through the GD and ECO programme to cover these costs. As noted by one interviewee *"Green Deal and ECO for us is going to be a trickle…if the administration costs start outweighing the profit coming in, we'll stop"*

4. GD certification, standards and tools

This chapter analyses suppliers' experiences of the GD certification process. It also investigates suppliers' views on the standards that they follow, and the tools that they utilise as part of the delivery of GD

Key messages

- GD suppliers' views on the GD certification process were mixed, with between 35% and 42% of suppliers rating their experience as good, and about the same proportion rating it as poor. These proportions did not vary significantly depending on when a supplier was authorised or business size.
- Qualitative interviews with a sample of suppliers explored dissatisfaction with GD certification processes in more detail. Common issues raised by interviewees included: a belief that standards were not being applied consistently across all applicants (resulting in variable quality amongst certified GD suppliers); concerns over the costs of certification, particularly when set against lower than expected income through GD; and a perception that certification was unduly complex, time-consuming, and duplicated existing certification schemes (e.g. the Gas Safe Register) without adding value.
- The majority of assessors and installers (64% and 55% respectively) had taken over two months to become certified GD suppliers, whereas for advisors the process was typically quicker (for 43% of advisors it had taken under four weeks).
- Most suppliers were satisfied with the information provided by their certification body. Around a third of each type of supplier noted that they wished to receive additional information, with clearer guidance on GD processes and ongoing post-certification support the most common requests. Qualitative interviews with suppliers explored this issue in more depth, and found examples of suppliers that believed there should be: regular updates available about changes to the GD and ECO programme; and better signposting about where to go for information about specific parts of the GD and ECO programme (potentially including a support 'network' that they could utilise).
- Around half of each type of GD supplier believed that GD ORB was managing the accreditation and registration process effectively. Smaller businesses were more likely to view GD ORB as effective than larger businesses.
- The majority of each type of GD supplier believed that the GD Quality Mark improved the reputation of their firm and/or offered reassurances to customers. In-depth qualitative interviews identified some examples where suppliers believed that uncertified operators were using the GD Quality Mark in order to secure work, and then providing misleading information to customers or behaving fraudulently (e.g. taking payment then not delivering services). These interviewees were

concerned about these activities, and the damage that this could cause to the GD 'brand'.

- The majority of each type of GD supplier believed that the standards and requirements associated with being a GD supplier were fit for purpose. Most advisors and assessors believed that the assessor Specification and the National Occupational Standards for advisors were fit for purpose. Most installers believed that the PAS2030 (Publicly Available Specification 2030) standards were fit for purpose. Moreover, there was also majority agreement that PAS2030 standards were an improvement on what they understood to be previous standards, and that they would eventually become the benchmark used across the installation industry. Qualitative interviews highlighted the importance of the enforcement of standards, with some interviewees reporting that they believed there should be more frequent checks (e.g. as to whether the work of GD installers was PAS2030 compliant).
- Just over half of advisors and assessors (60% and 52%) believed that the Occupational Assessment (OA) tool was fit for purpose. The majority of advisors and assessors (72% and 64%) believed that the Reduced Data Standard Assessment Procedure (RdSAP) tool was fit for purpose. Qualitative interviews explored in more depth the reasons why some GD suppliers were dissatisfied with RdSAP. It was suggested that there are ambiguities in the design of the tool, which lead to inconsistencies in interpretation and application. For example, one advisor believed that the treatment of glazing under RdSAP was too simplistic.

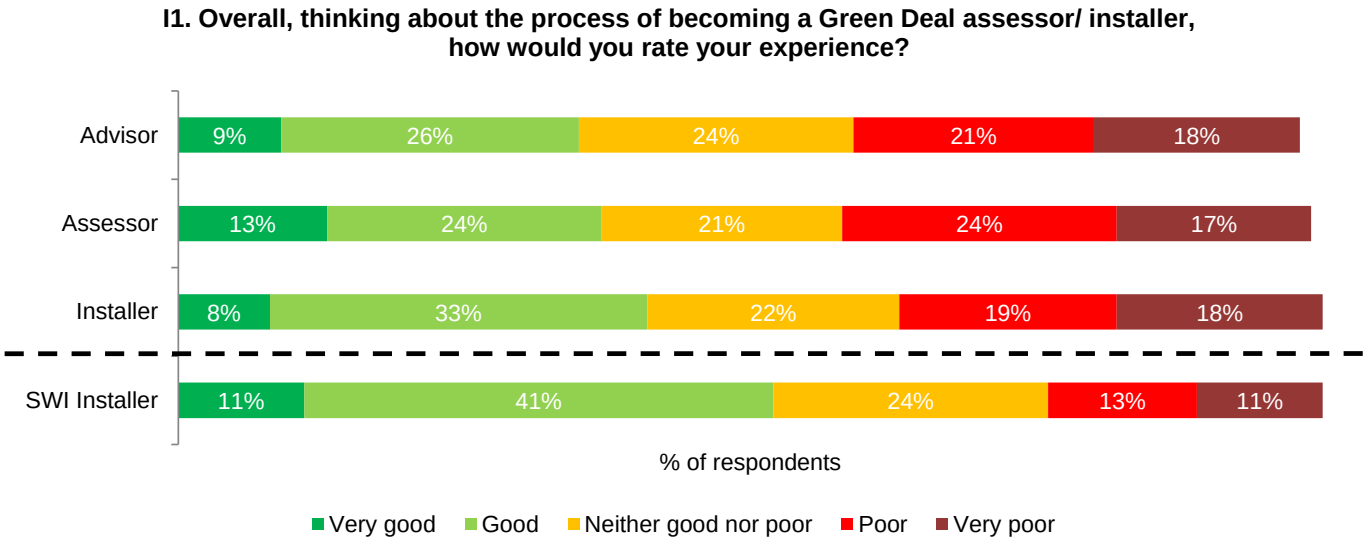
Suppliers' experiences of certification

Suppliers' views on the GD certification process

4.1. Suppliers were asked to rate their experience of becoming certified (Figure 4.1). Between 35% and 42% of advisors, assessors and installers rated their certification experience as 'good' or 'very good', and similar proportions rated their experience as either 'poor' or 'very poor'. SWI installers were more likely than installers as a whole to rate their certification experience as 'good' or 'very good' (52% compared to 42%).

4.2. Perceptions of the certification experience were not significantly different between businesses of different sizes, which suggests that the process was experienced similarly regardless of whether an applicant was an SME or large business. There were also no significant differences depending on when a supplier became certified (measured by comparing suppliers certified up until the end of June 2013 with those certified between July 2013 and October 2013).

Figure 4.1: How supply chain actors rated their experience of the process of becoming a certified Green Deal supplier



Base: All respondents – advisors (184), assessors (120), installers (426), SWI installers (151); Note: excludes don't knows (which ranged from 0-1%) so does not sum to 100%

4.3. Qualitative interviewees agreed that the GD certification scheme was a way in which to reassure consumers that they were dealing with organisations and individuals that had been through a robust and credible process, and had met certain minimum standards. Suppliers also reported benefiting from the same reassurances themselves when establishing new partnerships with other GD suppliers, although several interviewees had still experienced issues with other suppliers. In these cases it was reported that they also undertook additional checks on prospective partners and set their own standards (described in more detail below).

4.4. Some interviewees reported that another benefit to GD certification was the training that was received in order to gain an understanding of GD and ECO processes, and the specific systems and software used by their respective certification body. According to one interviewee:

"GD certification processes are robust and provide the benefit of 'keeping everyone on their toes'. Training and up-skilling is ongoing for GD and ECO to tell people what's what, what the flavour of the day is"

GD assessor

4.5. Some interviewees believed that GD certification processes were not being applied consistently. One assessor questioned the consistency of the certification processes between different certification bodies, stating *"there are advisors who have gone through the certification process but do not have the same level of knowledge as my team. Knowing what my team went through* [to become certified] *leads me to question whether others have been through as rigorous a process, which raises concerns about whether it is being applied consistently".* Another interviewee was certified as both an installer and an advisor and suggested that it was considerably easier and cheaper to meet the necessary standards and become certified as an installer than it was to become certified as an advisor.

4.6. Other suppliers raised issues with the financial and time costs associated with the certification process. Interviewees within the sample reported that the financial costs of certification ranged from £1,000 to £5,000. The variance in costs appeared to be influenced by a range of factors such as: whether suppliers were already registered with their certification bodies and/or were already certified under other schemes; the type of supplier (whether advisors, assessors or installers); the measures that installers planned to install; and whether training courses included additional costs (e.g. residential courses including accommodation and food costs).

4.7. There were also ongoing costs associated with certification, which were reported to include renewal fees, and training courses and auditing costs. Installers also mentioned the associated costs of having to pay for larger insurances than they would otherwise have carried (e.g. public liability insurance, professional indemnity insurance and employers' liability insurance). The overall costs of certification, therefore, were reported to be significant and, unsurprisingly, were a particular issue for those businesses that had not delivered much activity through the GD and ECO programme. The costs of certification relative to the benefits were a key issue for some interviewees:

"It just seems an awful lot of money… we've done our bit of the bargain but there's not been a lot coming out the other end"

GD installer

"The way that things are progressing with GD and ECO means that we are unlikely to recover the significant costs that we have invested in obtaining certification. There will also be renewal fees to pay, as well as costs of keeping paperwork up to date and keeping up to date with changes to the programme."

GD assessor

4.8. Other common issues identified by interviewees included a perception that the certification process was overly complex, bureaucratic and lacking sufficient support. The time taken to complete all of the paperwork and provide evidence of experience was considered excessive by many, in addition to the time taken to establish quality management systems and attend training events. This was a particular issue amongst smaller suppliers, and especially for suppliers that had also registered with other suppliers (e.g. GD providers), local authorities and other certification bodies. One assessor stated: *"It took us a year to secure all the GD and other accreditations to enable us to deliver assessments for GD/ECO, work with local authorities, etc. That will be a big barrier for new businesses."*

4.9. Most suppliers already held certifications to other schemes, and many raised issues of unnecessary duplication with these existing schemes, such as the Microgeneration

Certification Scheme (MCS), Gas Safe register, Competent Person Scheme (CPS), and the Domestic Energy Assessor (DEA) scheme. For example, an installer of gas boilers stated that *"the paperwork took us days and days… and it's all repetitive anyway. Most of it is unnecessary. We're Gas Safe registered anyway, so why is this standard any different?"*

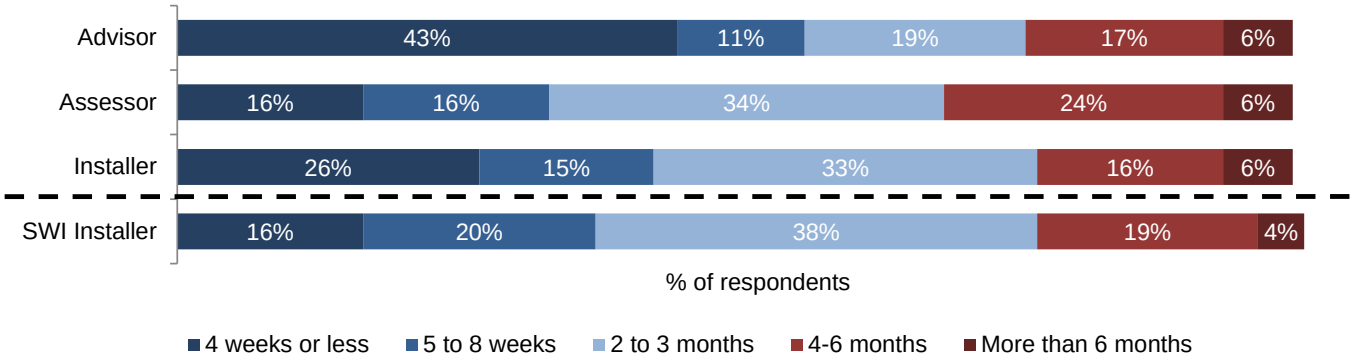
The duration of the certification process

4.10. As Figure 4.2 shows, for the majority of assessors and installers (64% and 55% respectively), the GD certification process took at least two months. Certification was significantly quicker for advisors, with under half of these individuals (43%) reporting that certification had taken less than four weeks.

4.11. There was no statistically significant difference in the duration of certification depending on when suppliers were certified (based on a comparison of suppliers that were certified before June 2013 and suppliers that were certified between July and October 2013).

Figure 4.2: The duration of the GD supplier certification process

Question I3: How long did the GD registration/ certification process take from application to registration?



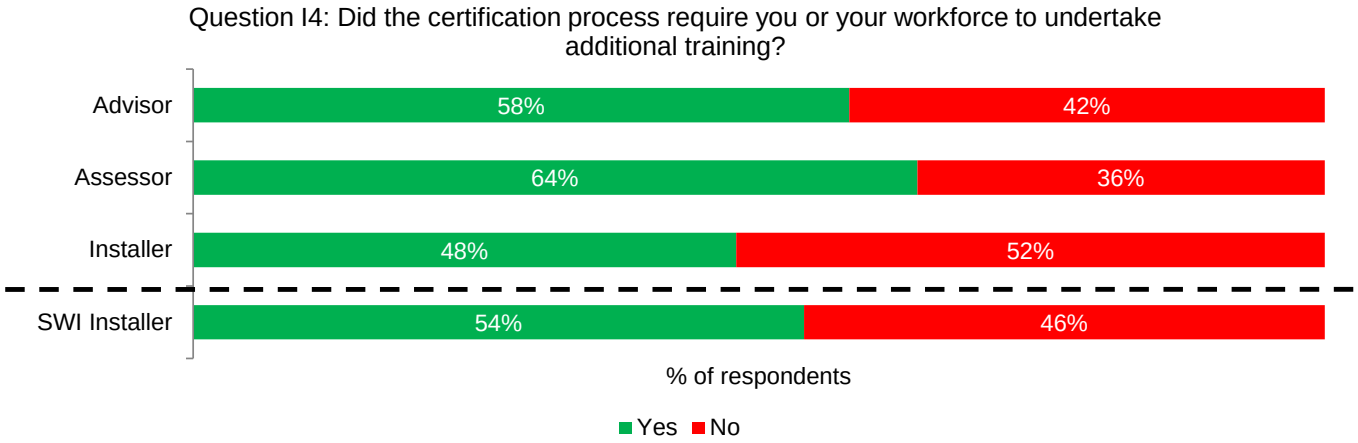
Base: All respondents – advisors (184), assessors (120), installers (426), SWI installers (151); Note: excludes don't knows (which ranged from 3-5%) so does not sum to 100%

Training needs as part of the certification process

4.12. As Figure 4.3 shows, over half of advisors and assessors reported that they had had to undertake training as part of the certification process (58% and 64% respectively). Additional training was required by just under half of installers (48%), though analysis by sub-group of installer indicates that the extent to which training was required did vary according to the background and service offer of installers. Specifically, installers were significantly more likely to have required training as part of the certification process if, under GD and ECO, they:

- Helped arrange finance for customers (60% compared to 45% of installers that did not help arrange finance).
- Installed insulation (64%, compared to 53% of installers of conventional heating and 39% of installers of renewable energy products).
- Were registered as GD installers between July and October 2013 (53% compared to 43% of installers that were registered up until the end of June 2013).

Figure 4.3: Training required as part of the certification process



Base: All respondents – advisors (184), assessors (120), installers (426), SWI installers (151)

Suppliers' experiences of certification bodies

4.13. Certification bodies are responsible for assessing and certifying GD suppliers. GD suppliers were asked whether 'their' certification body had provided them with enough information about what to expect as a GD supplier (Figure 4.4). Around two thirds (between 61% and 74%) of each type of supplier reported that they had received enough information from their certification body.

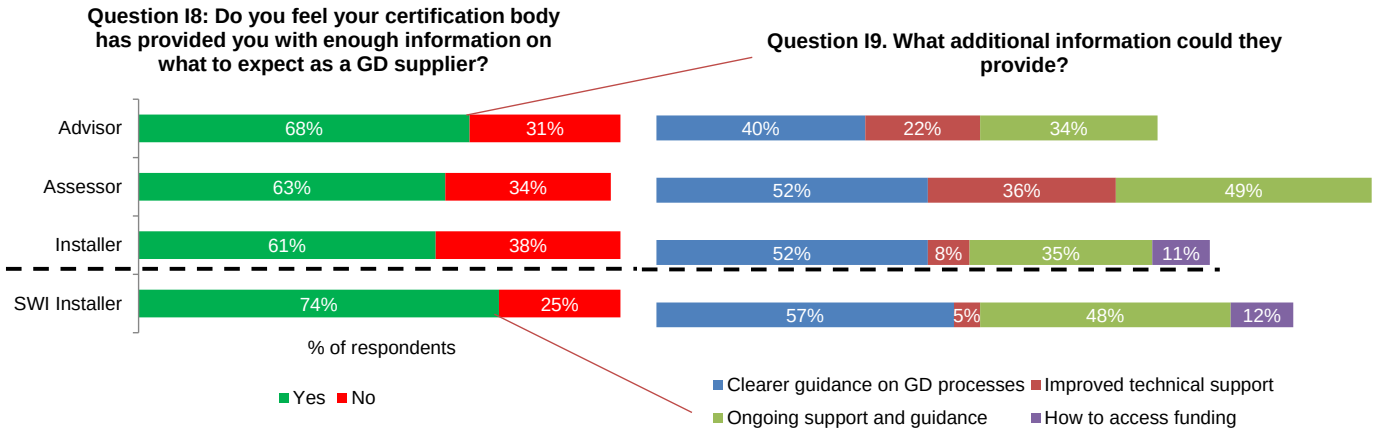
4.14. Some suppliers were more likely to report that their certification body had provided them enough information. Amongst advisors, for instance, individuals that were employed by a GDAO were significantly more likely than sole traders to report that they had received enough information (74% compared to 55%). Amongst installers, the size of business seems to have been a relevant factor in businesses' experiences of certification. Medium/large sized installers were significantly more likely than micro or small sized installers to report that they had received enough information (75% of medium/ large installers, compared to 57% and 66% of micro and small installers).

4.15. Between 25% and 38% of each type of GD supplier felt that they did not receive enough information from their certification body. Suggested improvements included:

- Clearer guidance on GD processes was the most commonly requested type of information, requested by around half (40% to 57%) of each type of supplier. One interviewee, for example, requested that certification bodies should provide examples of completed forms, in order to give steer as to what was required
- Ongoing support and guidance (e.g. post-certification continuing professional development training) was requested by between 34% and 49% of suppliers
- Many advisors and assessors requested improved technical support, such as support with the software underpinning GD assessments (22% and 36% of advisors and assessors respectively)

4.16. Other types of information and support that were requested by interviewees included: more market information, such as data on levels of activity under GD and ECO; and improved information on the identities of other GD suppliers, particularly GD providers that were looking to commission assessments/ installations.

Figure 4.4: Whether GD suppliers received enough information from certification bodies, and if not what extra information could be provided



Base: Question I8 - All respondents – advisors (184), assessors (120), installers (426), SWI installers (151); Question I9: All that felt that they had not received enough information – advisors (58), assessors (41), installers (148), SWI installers (38); Note: Question I8 excludes don't knows (which ranged from 1-3%) so does not sum to 100%, Question I9 multiple answers were permitted, excludes 'other' and categories that less that 10% of any type of respondent selected

4.17. As part of the qualitative interviews, some suppliers suggested that they had experienced a lack of support from certification bodies, who they felt had demonstrated a lack of knowledge and understanding of the GD programme and the certification processes. For example, an advisor that was one of the first to become certified reported that they had experienced 'teething problems':

"I had to jump through about 25,000 hoops and found there was a real lack of information about what we had to do and no-one was able to help… it very much seemed as though the certification bodies were learning as they went along"

GD advisor, sole trader

4.18. The qualitative interviews also found evidence of a lack of ongoing support for suppliers, particularly amongst advisors and assessors. Several suppliers stated that they expected more regular updates about the GD programme, particularly given ongoing changes and developments in programme design and processes. These interviewees believed that their certification body should tell them how any programme changes

would affect them, as well as providing a specific point of contact for any questions about the programme. Advisors and assessors noted that they received occasional press releases from their certification body, but felt that access to information needed to be improved. For example, an advisor stated that they had felt slightly 'abandoned' by their certification body and had been *"left in the wilderness"*, with a lack of information about progress and developments with the programme. The same individual was not aware of changes to cashback or the new incentives package, suggesting issues with awareness and the dissemination of information.

4.19. Issues with certification bodies were part of a wider concern amongst interviewees about the complex management and delivery structure of the GD programme (involving DECC, GD ORB, certification bodies and GD providers), and a need for improved signposting about where to go for information about different aspects of the programme. This included topics such as: GD cashback; general GD processes; the ECO brokerage platform; proposed changes to the programme; complaints about other suppliers; and, concerns about the actions of non-certified suppliers. According to one interviewee:

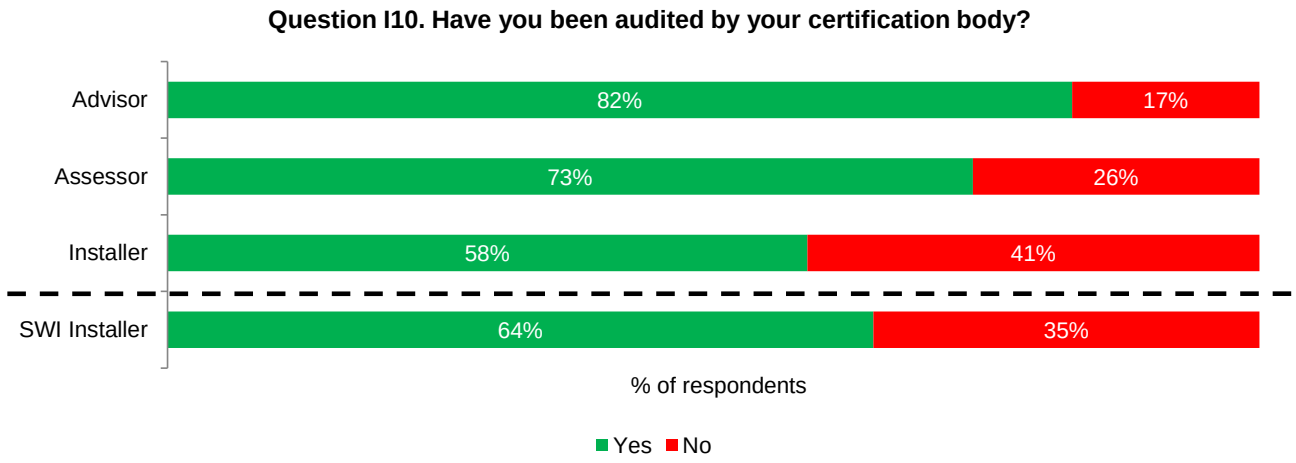
"For me what would be really helpful would be some sort of support network or support team that [we] *could approach for genuine information about GD and ECO and how it's working because the info that I get is fed to me through the providers, other local organisations and the DECC newsletters and it changes so quickly and it would be great if there was a phone number that I could call and ask 'is it true that….' or 'why is this happening…' Phoning someone up and saying…this has come up on my GDAR, it wasn't in my training, I don't really understand why this has happened…can you explain it to me? Really basic stuff… it sounds silly but there are so many anomalies and things that don't make sense or don't add up."*

GD assessor

Audits by certification bodies

4.20. Suppliers were asked whether they had been audited by their certification body (Figure 4.5). The majority of each type of supplier reported that they had been audited, ranging from 82% of advisors through to 58% of installers. Amongst installers, medium/ large businesses were significantly more likely to have been audited than micro-sized businesses (55% of micro-sized installers had been audited, compared to 74% of medium/ large sized installers).

Figure 4.5: Whether GD suppliers had been audited by their certification body



Base: All respondents - advisors (184), assessors (120), installers (426), SWI installers (151); Note: excludes don't knows (which were 1% for all suppliers) so does not sum to 100%

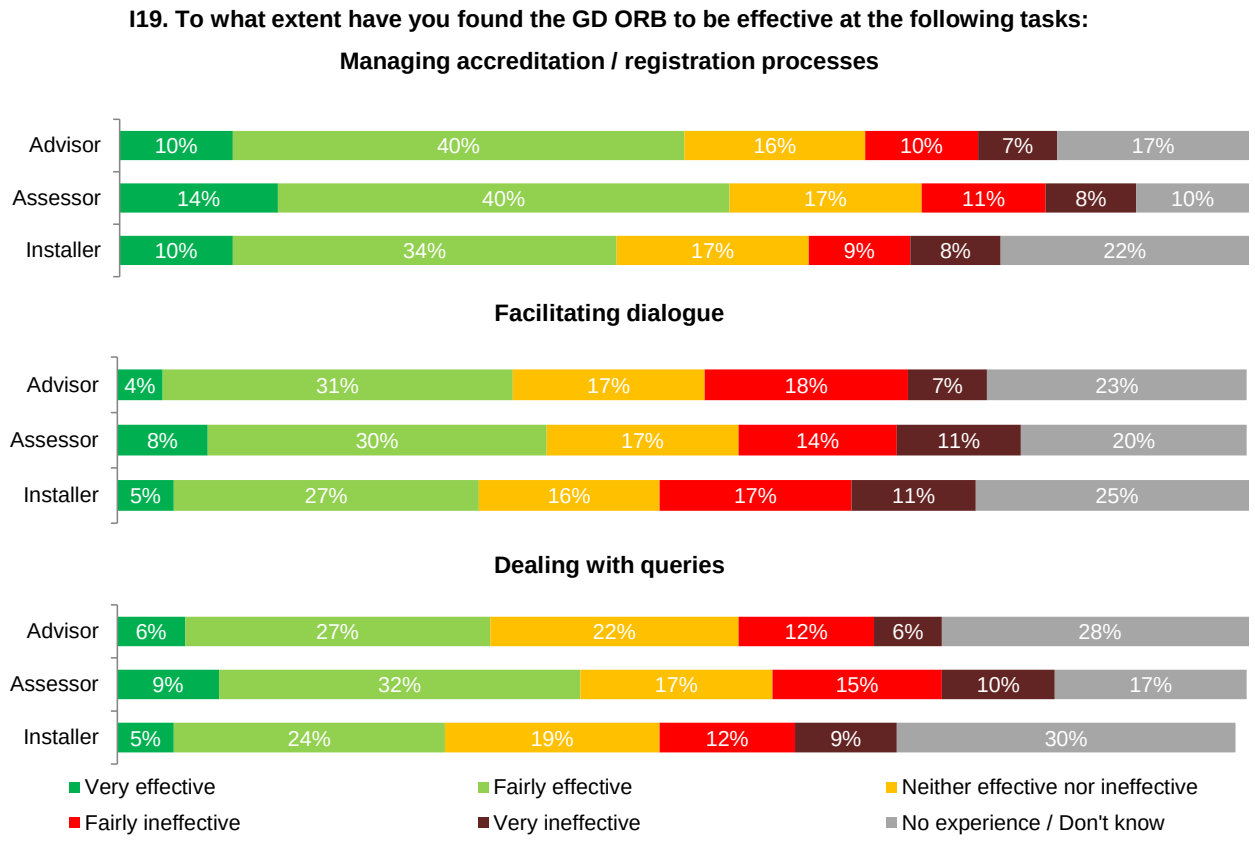
Views on the role of GD ORB within the certification and administration processes

4.21. The Green Deal Oversight and Registration Body (GD ORB) works on behalf of DECC to manage the authorisation and certification scheme for GD suppliers. It is responsible for a number of functions associated with administration and oversight of the GD programme, including: managing the certification schemes for certification bodies (who in turn manage the certification scheme for GD advisors, assessors and installers) and for GD providers; maintaining a register of all authorised GD providers, certification bodies, assessors and installers; maintaining the GD Code of Practice; controlling the use of the Quality Mark; ongoing monitoring of GD participants against the Code of Practice; delivering stakeholder fora to discuss strategic issues affecting the supply chain and ensure the governance documents remain fit for purpose; and gathering evidence of non-compliance and referring participants to the Ombudsman or the Secretary of State where appropriate and imposing sanctions when directed.

4.22. GD suppliers had mixed views on the effectiveness of GD ORB (Figure 4.6). Around half of suppliers (between 44% and 54% of each type of supplier) felt GD ORB was effective at managing the accreditation and registration processes associated with GD certification. Micro-sized installers were significantly more likely to believe that GD ORB managed accreditation/ registration effectively than was the case for medium/ large installers (46% of micro-sized installers and 28% of medium/ large installers believed that GD ORB was effective in this regard).

4.23. Around a third of suppliers believed that GD ORB was effective in dealing with queries (33% of advisors, 41% of assessors and 30% of installers). It should be noted that large proportions (between 17% to 30% of all supplier types) had not had any experience of submitting queries to GD ORB, and thus could not comment on its effectiveness.

Figure 4.6: Views of effectiveness of GD ORB within the certification and administration process



Base: All respondents – advisors (184), assessors (120), installers (426)

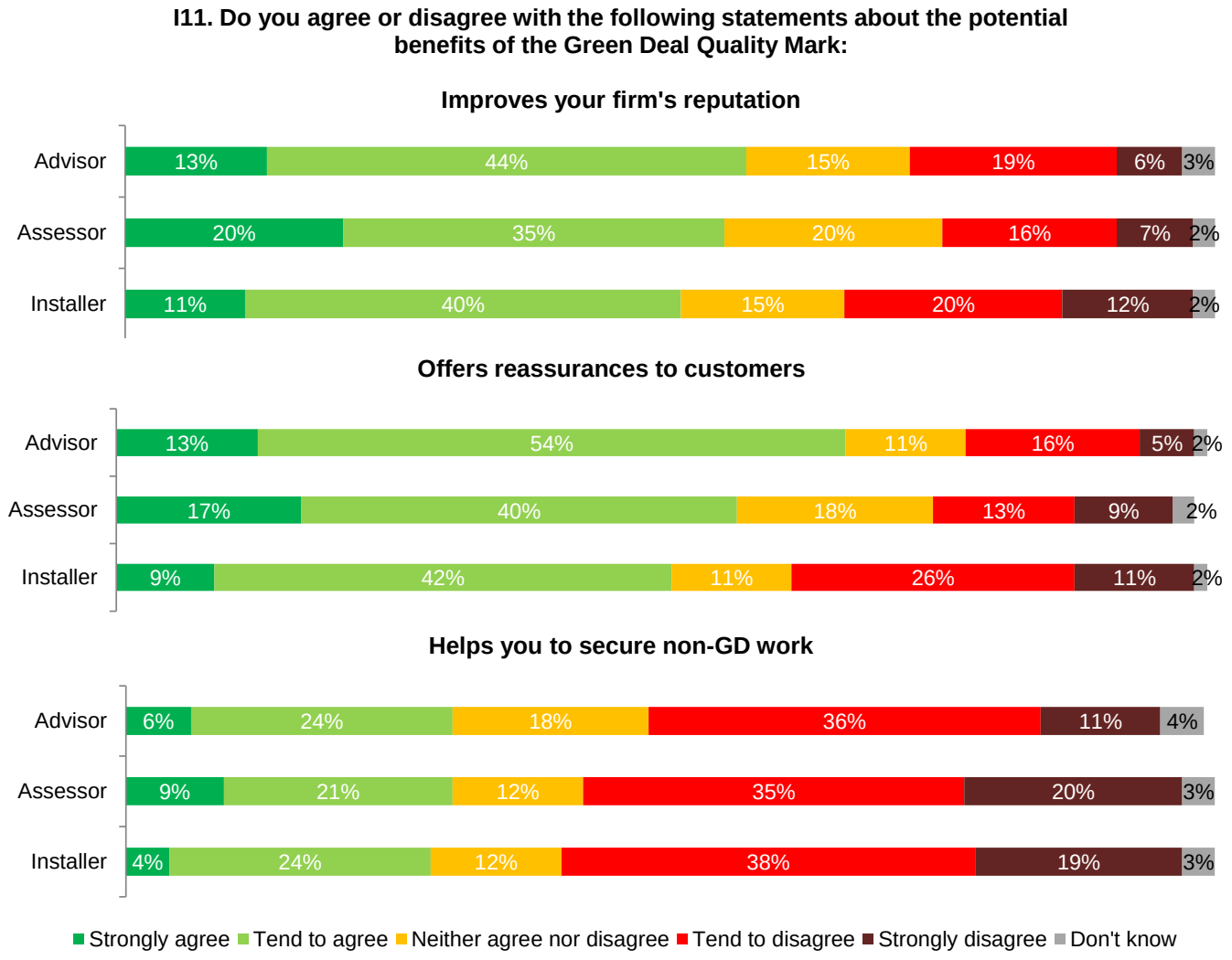
Views on the Green Deal Quality Mark

4.24. GD suppliers were asked to indicate the extent to which they agreed or disagreed with a series of statements about the GD Quality Mark (Figure 4.7). The GD Quality Mark is a symbol that GD suppliers must include as part of identifying documents and marketing material associated with the GD. It is intended to build trust and confidence in the GD.

4.25. Between 52% to 57% of each type of supplier agreed that the Quality Mark improved their firm's reputation, and between 51% and 67% agreed that it offered reassurances to customers (advisors were the most likely to agree with this statement). A minority of GD suppliers agreed that the GD Quality Mark helped them to secure non-GD work (in the region of 30% across all supplier types).

4.26. Installers of insulation were significantly more likely than installers of either heating technologies or renewable technologies to report that the Quality Mark had had a positive impact on their business. Some 68% of insulation installers agreed that the Quality Mark had improved their firm's reputation, and 61% believed that the Quality Mark offered reassurances to customers.

Figure 4.7: The views of GD suppliers on selected features of the GD Quality Mark



Base: All respondents – advisors (184), assessors (120), installers (426)

4.27. Qualitative interviews with a sample of GD suppliers suggested that there was an issue concerning non-certified suppliers using the GD Quality Mark and pretending to be certified. It was reported by some interviewees that many of these uncertified businesses (as well as some certified ones), were misleading customers and generating unrealistic expectations of funding in order to sell assessments. Examples of these behaviours that were highlighted by interviewees included:

- *"Telling customers it will cost £x for a GD report, promising this and that, taking the £x and then disappearing".*
- Making false claims about the GD and ECO, for example: "*these people are going round the doors of residents to tell them they could get solar PV and solid wall insulation completely free of charge if they have an assessment*".

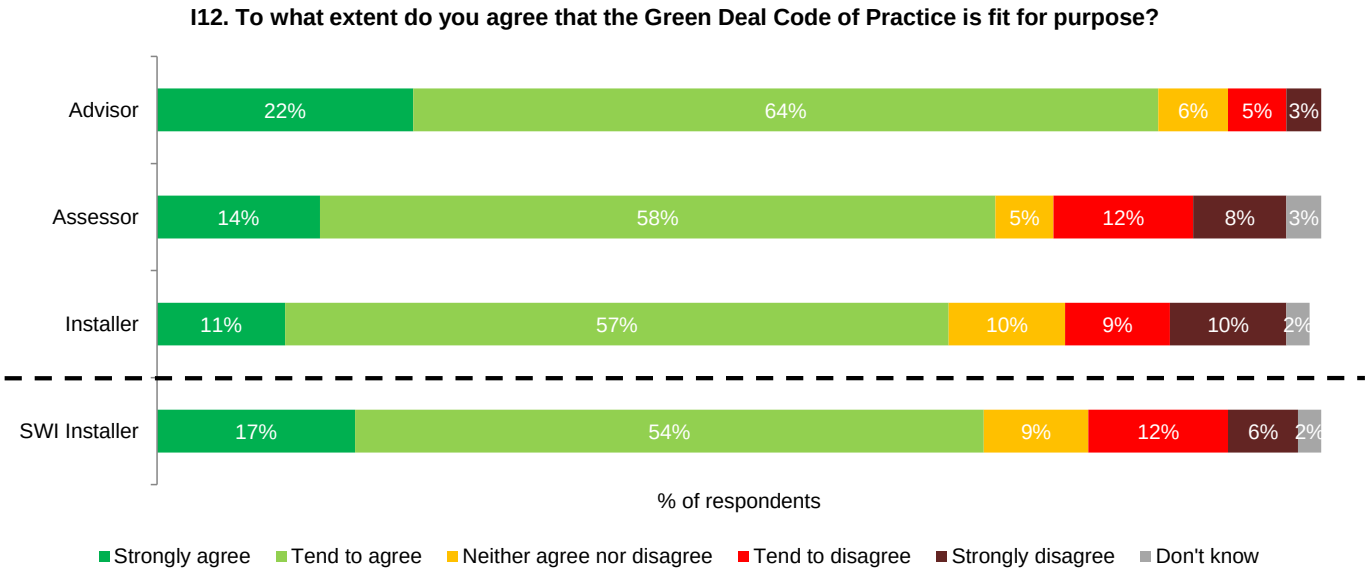
4.28. Suppliers were concerned about these activities, including the potential damage to the GD brand and the reputation of GD-certified suppliers.

Views on the Green Deal Code of Practice

4.29. The Code of Practice sets out the criteria that GD assessors and installers must follow in order to operate under the Green Deal banner. It sets out the procedures that suppliers are expected to follow at each stage of the customer journey, and is intended to raise standards and provide reassurance to customers.

4.30. As Figure 4.8 shows, the majority of GD suppliers believed that the GD Code of Practice was fit for purpose. Advisors were significantly more likely than other types of supplier to agree that the Code of Practice was fit for purpose (86%, compared to 72% of assessors and 68% of installers).

Figure 4.8: Whether GD suppliers believed the GD Code of Practice was fit for purpose



Base: All respondents – advisors (184), assessors (120), installers (426), SWI installers (151)

4.31. The qualitative interviews explored some of the issues with the Code of Practice and identified some suppliers who suggested that these requirements had impacted on prices. GD assessments were seen to cost considerably more than a standard EPC, and GD installations cost more than standard installations because of the additional warranties and quality systems. According to one installer: "*You can get a boiler changed for £1300 from a one-man band who wants cash….but the government want someone who is accountable, traceable, with a quality management system in place etc…it's not a £1300 situation*".

4.32. Other interviewees argued that the need to provide consumers with three quotes for each installation could be inconvenient for customers, who have to make sure they are at home for suppliers to visit their property. One assessor suggested that *"by the time the customer gets an assessment there will have been a lot of people in contact with them and then they have to get three quotes. From start to finish there will be 8 people visiting the property. This could be streamlined."*

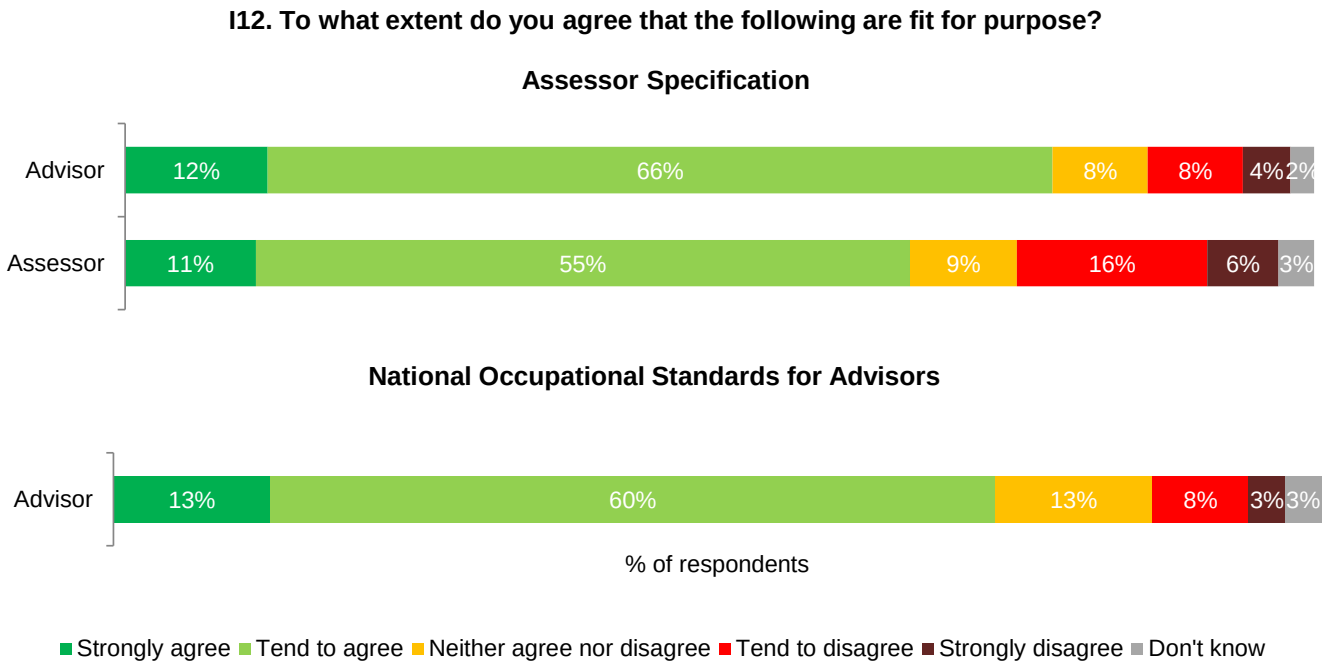
Views on standards for advisors and assessors

4.33. Advisors and assessors must comply with specific standards:

- The Assessor Specification, which sets out eligibility criteria for advisors and assessors, management and monitoring requirements associated with the assessment service, and operational procedures that advisors and assessors are expected to follow as part of a GD Assessment and the production of a GDAR
- The National Occupational Standards for advisors, which are agreed statements of the skills, knowledge and understanding that advisors are required to possess. assessors are responsible for ensuring that all advisors working on their behalf comply with the relevant requirements of the National Occupational Standards for advisors

4.34. As Figure 4.9 shows, most advisors and assessors agreed that the assessor Specification and the National Occupational Standards for advisors were fit for purpose.

Figure 4.9: Whether GD suppliers believed advisor and assessor standards were fit for purpose



Base: All advisors (184) and assessors (120)

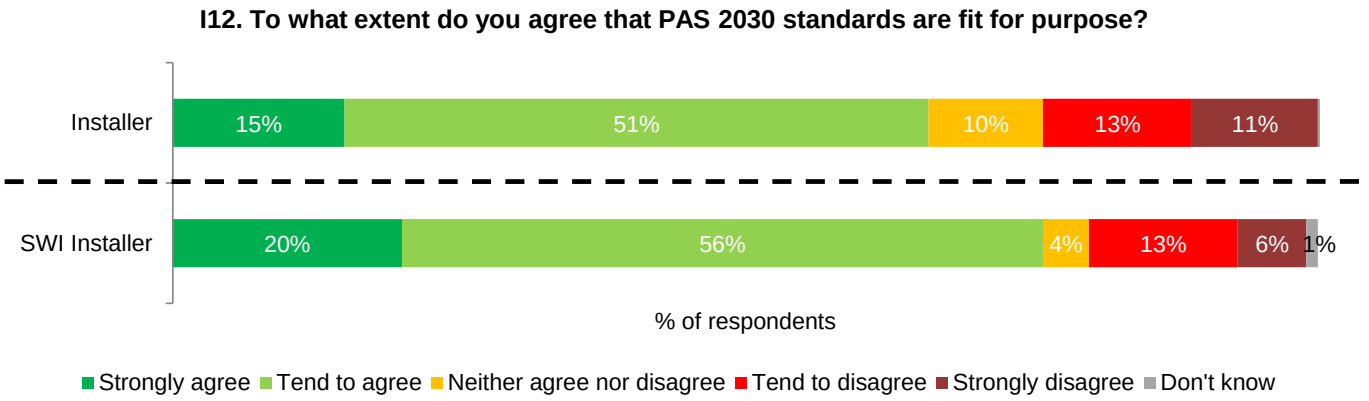
4.35. Qualitative interviews highlighted issues in terms of ensuring compliance across suppliers. As one assessor noted, *"if everyone sticks to them* [the standards]*, then the customer will be dealt with in a proper manner."* However, there were also suggestions from a few suppliers that the advisors and assessor standards should be extended to provide a structure for charges for assessments, possibly giving a maximum price to protect consumers from being over-charged. These advisors and assessors felt that it was potentially damaging for the GD programme that customers were being charged such a wide range of prices for the same service.

Views on PAS2030 standards for installers

4.36. Most installers (66%) believed that the PAS2030 standards were fit for purpose (Figure 4.10). All energy efficiency measures financed under GD must be installed in accordance with the PAS2030 standards. Compliance with PAS2030 standards is also often a requirement for measures installed using ECO funding. SWI installers were significantly more likely to view PAS2030 standards as fit for purpose than installers as a whole (76% compared to 66%).

4.37. As Figure 4.11 shows, just under two thirds of installers believed that PAS2030 standards were of a higher standard than what they understood to be previous requirements (63%), and that PAS2030 standards would eventually become the industry benchmark (61%).

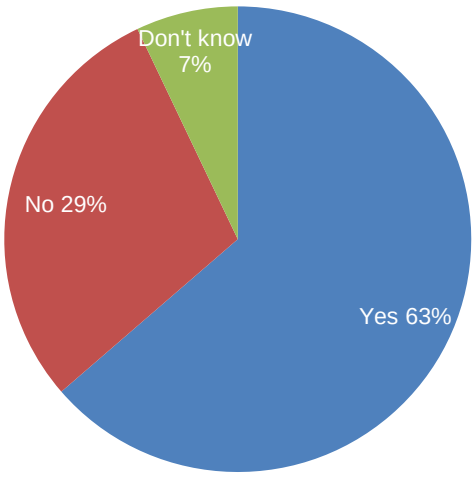
Figure 4.10: Whether GD installers believed PAS2030 standards were fit for purpose



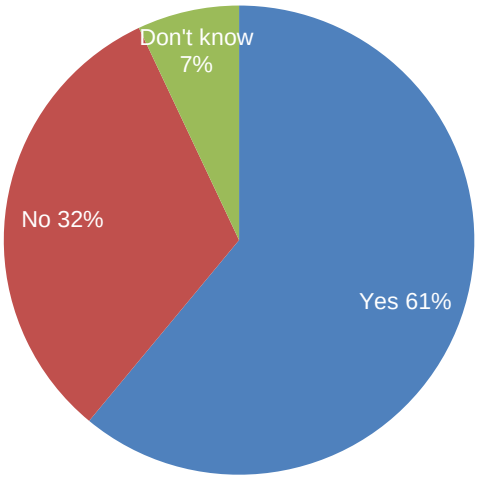
Base: All respondents – installers (426), SWI installers (151)

Figure 4.11: Views of GD installers on PAS2030 standards

Question I14: Do you think PAS2030 standards are a higher standard than previous practice?



Question I15: Do you think PAS2030 standards will become the industry benchmark across the installation market?



Base: All installers (426)

4.38. The qualitative interviews found that most of the installers in the sample who felt that the PAS2030 standards were fit for purpose were following the same standards across all

non-GD installations (and were checking that their sub-contractors were also certified). However, other interviewees highlighted some concerns about the PAS2030 standards:

- The costs of certification and adhering to the PAS2030 standards, and the impacts that this has on the prices charged to customers (as noted by one installer: *"they are appropriate* [the PAS2030 standards]*…but they do push costs up"*
- Doubts that the PAS2030 standards would become the industry standard. For example, an installer who reported following the same standards for all GD and non-GD work stated that *"I try to* [follow PAS2030 standards on non-GD installations], *but I know that other companies don't"*
- Questionable enforcement of adherence to the PAS2030 standards. One installer stated that: "*the standards are ok in theory but enforcement is not good. Checks on installers are not carried out frequently enough*"

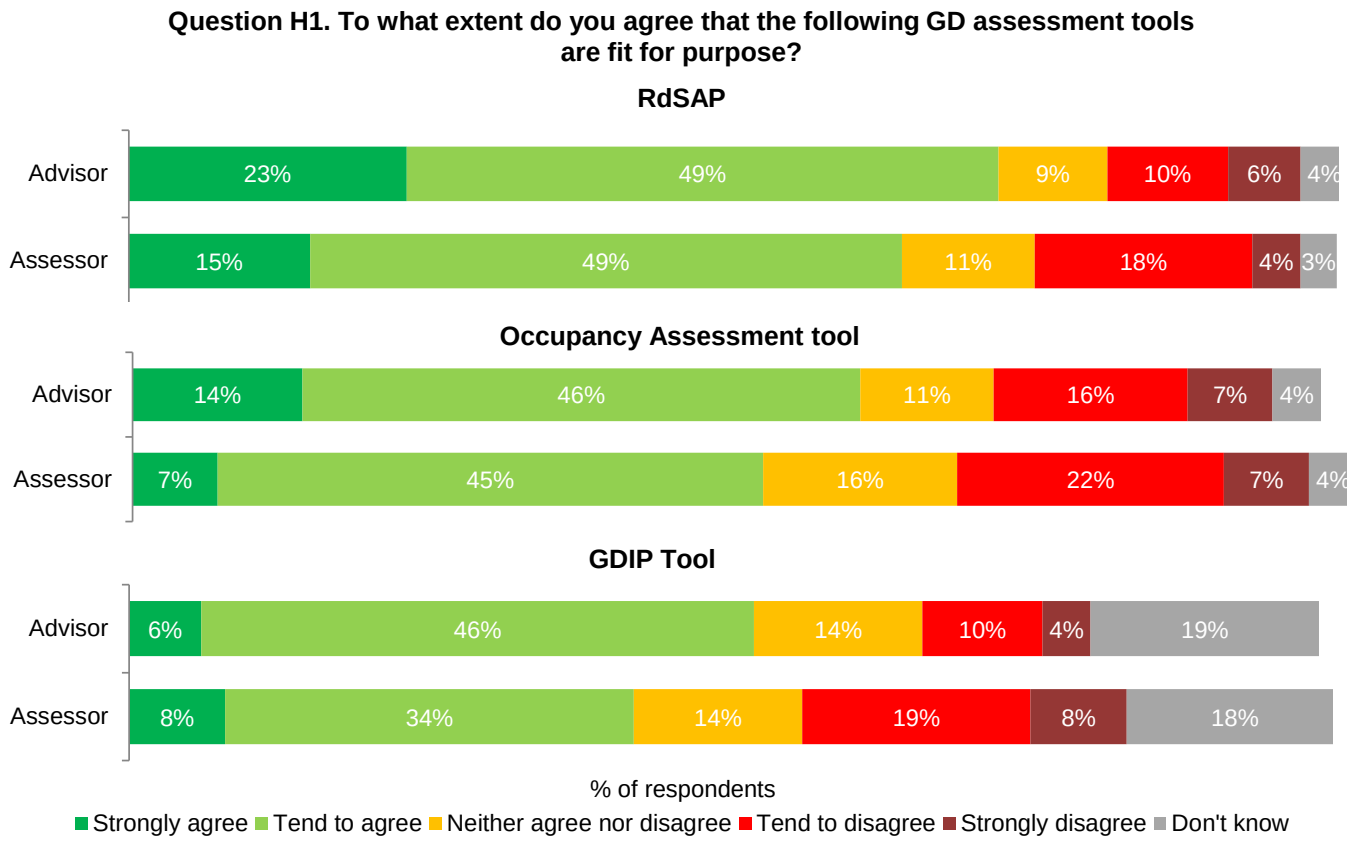
Views on GD assessment tools

4.39. Advisors and assessors were asked about their views on the following tools that are used as part of the GD assessment process:

- The Reduced Data Standard Assessment Procedure (RdSAP)[26]
- The Occupancy Assessment (OA) tool[27]
- The Green Deal Improvement Package (GDIP tool)[28]

4.40. As Figure 4.12 shows, the majority of both advisors and assessors agreed that the RdSAP tool was fit for purpose (72% and 64% respectively). Just over half of advisors (60%) and assessors (52%) also agreed that the OA tool was fit for purpose. However, assessors were significantly less likely than advisors to believe that the GDIP tool was fit for purpose (27% of assessors believed that it was not fit for purpose, compared to 14% of advisors). Sizeable proportions of both advisors and assessors did not express an opinion on the GDIP tool (19% and 18% of advisors and assessors respectively).

Figure 4.12: Whether GD advisors and assessors believed GD assessment tools were fit for purpose



Base: All advisors (184) and assessors, except assessors not planning to do Green Deal (115); note: does not sum to 100% due to rounding

[26] The Government's approved methodology for assessing the energy performance of existing dwellings

[27] Estimates the energy that could be saved by installing energy efficiency measures, based on actual energy usage

[28] A tool for retrieving previous domestic GDARs and re-calculating savings estimates for alternative combinations of measures. These can be lodged alongside GDARs and used as the basis for GD Plans

4.41. Qualitative research provided some insights into why some advisors and assessors did not think GD tools were fit for purpose:

- There was a lack of clarity and too much ambiguity relating to the assessment tools, which could result in inconsistencies in their interpretation and application, and their results should only be considered indicative. One example related to the overly-simplified treatment of glazing in the RdSAP, which could under-estimate the true efficiency of properties. An advisor stated that *"glazing variety is a big issue that needs addressing in the* [RdSAP]. *Some pre-2002 double glazing is actually quite good".* Another advisor was concerned at the ease with which it was possible for advisors to 'create' additional carbon savings in properties by using default values or overlooking existing measures to increase the likelihood of a property being eligible for funding. An assessor commented more broadly about issues with the RdSAP, stating that *"the RdSAP was designed to do a certain job but is now being used to do ten times as much as it was originally designed to do. It's not broken but is an assessment tool rather than an evaluation tool and is therefore being used for something it was never designed to do and this creates uncertainties and a lack of clarity."*
- The tools did not fit some properties. An example is park homes (e.g. mobile homes), which are usually poorly insulated and therefore present significant opportunities to improve their efficiency. However, the RdSAP could not be applied to these types of properties. An assessor stated *"it is not possible to apply RdSAP to these properties and we have ended up with a proposed 'bodge' where they are treated as a timber-framed bungalow, which they are not. We have been putting in external SWI and underfloor insulation to improve their thermal quality but that scheme is being run outside of GD and ECO."*
- There had been some issues with the software packages provided by some of the certification bodies. Advisors and assessors needed to invest time and money in purchasing, installing and learning to use the different packages and technologies used by different certification bodies. Examples identified by interviewees included: frequent software crashes; having to pass information manually to providers via spreadsheets; and issues with emerging technologies: "*We use* [tablets] *and lodge on site… which is not easy and it's another piece of equipment to carry around… I know my advisors hate it… and the camera on the iPad is useless*".

Views on GDARs

4.42. As part of the qualitative interviews, GD suppliers were asked about their views on the GDARs. Two key messages emerged from the interviews:

- GDARs were overly complicated and should be simplified in order to make them easier for customers to understand. Advisors suggested that the GDARs should be as simple as possible and should focus on the savings in energy bills as this would offer the greatest incentive and help put everything else into context. Other interviewees suggested that GDARs did not take account of any local incentives, such as those offered by local authorities. It was reported that this information is

critical, and that the customer will only find out about these opportunities if the advisor takes the time to explain them.

- Advisors were able to produce misleading assessments and inflate the potential carbon savings by overlooking existing measures and/or omitting specific details. An advisor suggested that this was sometimes done by advisors working on behalf of installers to increase the likelihood of funding being received and installations going ahead (and was done to avoid the risk that advisor fees would not be paid by the installers if the installation did not go ahead). Since auditors only checked the assessment reports and not the properties themselves, there was a perception amongst interviewees that there was a relatively low risk that these offences would be noticed, and it was suggested that auditors should also undertake spot checks on properties to address these issues.

5. Assessments and help with finance under GD and ECO

This chapter presents the evidence that was collected from advisors, assessors and installers about the GD assessment process, including the time taken and the charging models used by advisors. It then considers the provision of advice and support to customers, including whether GD suppliers discuss finance options

Key messages

- The majority of advisors and assessors that had delivered or planned to deliver GD assessments reported that they had done so, or expected to do so, on behalf of other organisations. Most advisors and assessors had established, or expected to establish, at least one new relationship as a result of GD and/or ECO, with GD providers and installers commonly identified as new supply chain partners. Potential partners were identified via searches of the GD ORB supplier register or other business directories, or through approaches by other organisations. Qualitative interviews with some GD suppliers identified problems with some of these relationships (e.g. not being paid for work, partners going out of business), and as a result many interviewees were using their own informal assessment processes to scrutinise potential partners.
- Advisors reported that the median average duration of a GD assessment was 90 minutes. Three quarters took less than two hours. GD assessments carried out for ECO (median average 60 minutes) were shorter than those carried out for GD. Qualitative interviews with GD suppliers found examples where interviewees believed that assessments driven by ECO requirements were typically focussed on individual measures (e.g. a boiler replacement under Affordable Warmth). It is likely that these single-measure driven assessments would be shorter, though interviewees did not confirm that this was the case.
- Most advisors and assessors provided, or planned to provide, some type of advice to customers as part of the GD assessment process. This advice primarily concerned details of the GD Advice Report (GDAR), advice to customers about what they might do next, and energy efficiency advice. Under half of advisors and assessors (39% and 45%) reported that they specifically recommended a GD provider or GD installer to customers once they had had their GD assessment completed.
- Some 60% of advisors reported that they charged for GD assessments. Of those that did not charge, this was primarily because the assessment was paid for by another party, mainly a GD assessor or an energy company. Some 8% of advisors reported that they did not charge for an assessment if customers took out

a GD Plan, and qualitative interviews also identified instances where advisors and assessors would refund assessments where the customer proceeded with an installation (regardless of whether this was through the framework of a GD Plan).

- Where a charge was levied for a GD assessment, advisors reported that the mean average cost (at the time of the survey in January/ February 2014) was £136. This charge ranged from £60 through to £250. Just under half (46%) of GD advisors 'sometimes' or 'always' varied this charge depending on whether or not the assessment was carried out to meet ECO requirements (either a GD assessment or a property surveyor's report is required for installations under CERO and CSCO).

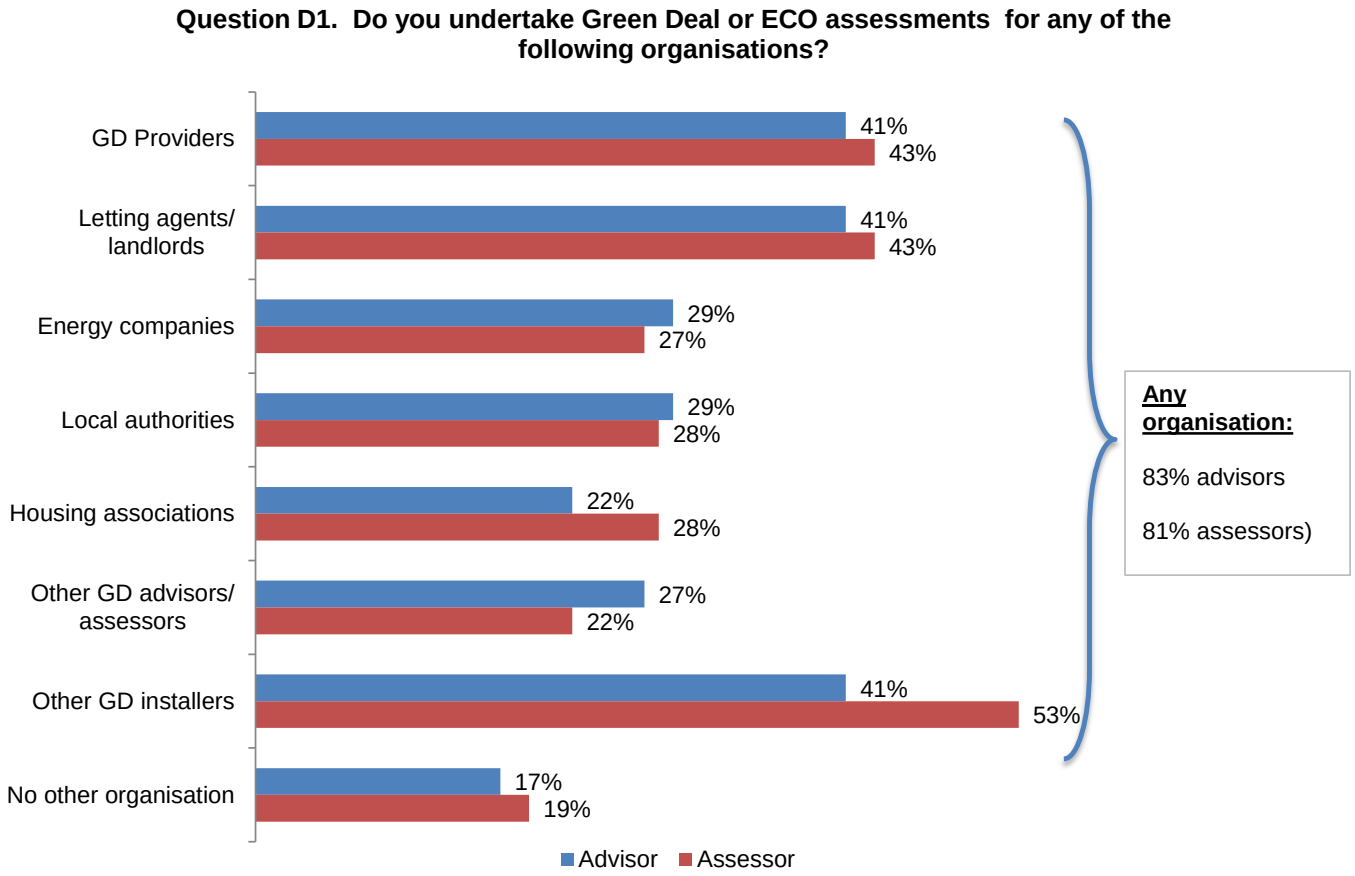
GD assessments carried out for other organisations

5.1. GD advisors and assessors were asked whether they had undertaken or planned to undertake any GD assessments on behalf of a selection of organisations, including other GD suppliers (Figure 5.1). The majority of advisors and assessors that were delivering or planning to deliver under GD/ ECO (83% of advisors and 81% of assessors) had carried out a GD assessment for another organisation.

5.2. Amongst both advisors and assessors, around 40% had carried or planned to carry out GD assessments for GD providers, letting agents/ landlords, and/or GD installers (the latter were more important for assessors, with around half (53%) indicating that they had carried out or planned to carry out GD assessments for installers).

5.3. Advisors that were employed by a GDAO were more likely to have established a relationship with certain types of organisation than was the case for sole traders. Specifically, advisors employed by a GDAO were significantly more likely to have undertaken or planned to undertake GD assessments for: energy companies (34% of those employed by a GDAO had done so, compared to 18% of sole traders), and housing associations (28% compared to 9%).

Figure 5.1: Whether advisors and assessors had delivered or planned to deliver GD assessments for other organisations



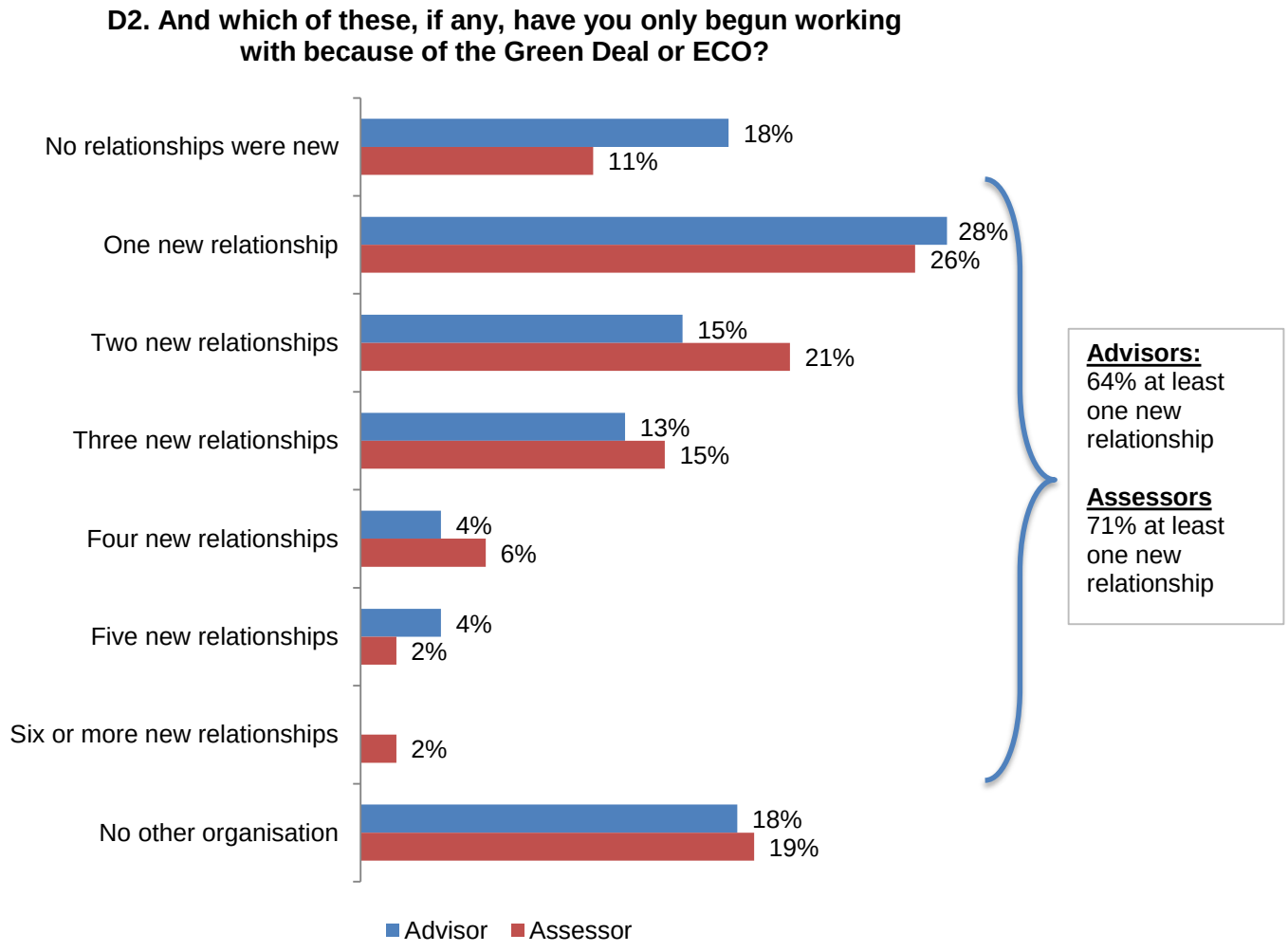
Base: those delivering or planning to deliver GD and/or ECO – advisors (181), assessors (117)

5.4. Advisors and assessors were asked whether any of these relationships with organisations were or would be new; that is, established as a result of GD and/or ECO (Figure 5.2).

5.5. Amongst those advisors that had delivered or were planning to deliver GD assessments under GD and/or ECO, just under two thirds (64%) had established or were expecting to establish at least one new relationship with another organisation. Some 36% had established or were expecting to establish multiple new relationships as a result of delivering under GD/ ECO. New relationships with GD providers and GD installers were the most common, with around a third (32% and 29% respectively) of advisors that had delivered or were planning to deliver GD assessments indicating that they had established or were expecting to establish new relationships with these organisations. It is possible that GD/ ECO had expanded the supply chain network patterns of some advisors, pushing them more towards the installation sector as a means of obtaining new market opportunities.

5.6. Just under three quarters (71%) of those assessors that had delivered or were planning to deliver GD assessments under GD and/or ECO had established or were expecting to establish at least one new relationship with another organisation. Multiple new relationships were other organisations were common for assessors, with 46% having established or planned to establish two or more new relationships. New links with installers (44% of assessors) and GD providers (38% of assessors) were the relationships that were most commonly identified by those assessors that had delivered or were planning to deliver GD assessments under GD and/or ECO.

Figure 5.2: The number of new relationships with other organisations established (or expected to be established) by advisors and assessors as a result of GD and/or ECO



Base: those delivering or planning to deliver GD and/or ECO – advisors (181), assessors (117)

5.7. Most of the advisors and assessors in the qualitative sample were working with either GD providers and/or GD installers and were undertaking GD assessments on their behalf. These included a mix of pre-existing and new relationships. Most new relationships with GD providers and installers had been established either by using the GD ORB registers to identify the relevant contacts, searching business directories and websites, or receiving enquiries from potential partners. Relationships with other advisors and assessors were more likely to be established via the certification bodies , in some cases to identify partners with similar processes and software:

"[We identify advisors through our certification body] *because we understand how their processes work, their systems, their software. We know what their requirements are. We just trawl through their database looking for postcodes that we're trying to fill, pick up the phone and have a conversation. We then make sure we get all their certifications and carry out the on boarding process and away we go."*

GD assessor

5.8. Some advisors and assessors were dissatisfied with many of these relationships. Reasons included: being offered poor rates of pay to undertake GD assessments; not being paid at all; working for businesses with poor reputations and poor customer service; and businesses being suspended or going out of business. Several interviewees reported being let down by partners and having to terminate relationships. A lack of trust was evident in many cases, and several advisors and assessors stated that they were using their own informal assessment processes to scrutinise and select potential partners.

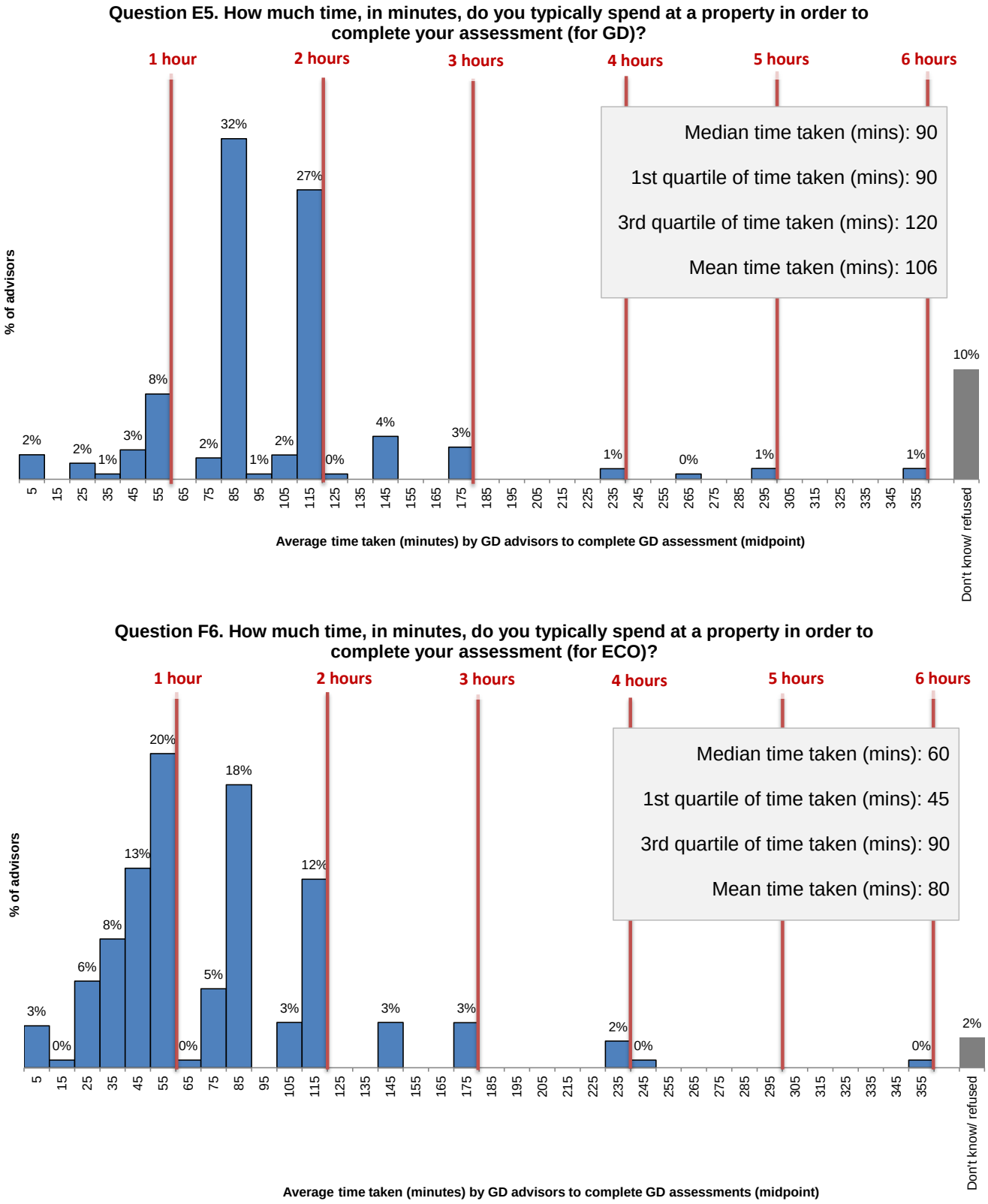
Time taken by advisors to complete an assessment for GD and ECO

5.9. The GD assessment process requires GD advisors to undertake a standard EPC assessment and an occupancy assessment (OA), which recommends energy efficiency measures that could be installed and the energy that a household could save, based on actual energy usage. The EPC and OA documents combine to form the GDAR for the property. As discussed previously, ECO installations do not require a GD assessment (though this is an option under CERO and CSCO), and instead a property surveyor's report may be used (under Affordable Warmth even this is not required).

5.10. Figure 5.3 consists of a histogram showing the average time taken by advisors to complete assessments for GD, and compares this to assessments undertaken for ECO. Most advisors reported that GD assessments for GD took either 90 minutes (32% of advisors) or 120 minutes (27% of advisors). Advisors spent significantly more time undertaking assessments for GD compared with assessments for ECO (median average 90 minutes compared to 60 minutes). A quarter of advisors reported that they typically took less than 45 minutes to complete an assessment for ECO.

5.11. There were no notable differences in the time taken to complete GD assessments between advisors with different business models. There was, for instance, no statistically significant difference in the length of time taken for a GD assessment depending on whether or not an advisor charged the customer.

Figure 5.3: Histogram showing the time that advisors take or expect to take to complete GD (upper histogram) and ECO (lower histogram) assessments



Base: Question E5 – advisors delivering or planning to deliver GD assessments for GD (167); Question F6 – advisors delivering or planning to deliver GD assessments for ECO (166)

Approach to assessments

5.12. The qualitative interviews included some GD suppliers that were trying to sell 'whole house' approaches to consumers (where they were not, this was often because they were installers of single measures such as gas boilers or SWI who were concentrating their efforts on the delivery of ECO). One such supplier (registered as a GD assessor, provider and installer) suggested that ECO should encourage the uptake of multiple measures (in a similar way to the preceding CESP initiative):

"Most of the work we do tends to be targeting multiple measures works in properties. In some properties we have installed internal and external wall insulation, floor insulation, loft insulation, windows and doors, all in the same property. But some will focus on individual measures, particularly when the focus is on boiler replacements under the Affordable Warmth scheme. I don't think the mechanisms under ECO promote a whole house approach. CESP was better in this regard as it provided bonuses to encourage multiple measures and I think this would be beneficial for ECO."

GD assessor, provider and installer

5.13. In some cases, demand was seen to drive whole house enquiries, as one assessor reported *"people are coming to us with long term, well-educated enquiries about whole house GD approaches which is positive"*. This assessor was only willing to work with GD providers and installers that were *"able to offer all GD approved measures"*. However, this was not common amongst other suppliers within the sample, who suggested that consumers were usually more interested in single measures because of the significant costs involved in whole house approaches. It was also noted that consumers wanted to 'test' the suggested cost savings of each measure. Therefore, it was noted, consumers generally preferred to take more of a piecemeal approach to the installation of measures.

5.14. It was also suggested by interviewees that the whole assessment process could do more to sell the benefits of installing measures in terms of reduced energy bills and help customers to move on to the next stage. It was noted by interviewees that some advisors and assessors were too focused on simply delivering assessments to earn their own fees, rather than providing customers with a more holistic information, advice and support service. One advisor raised concerns over the introduction of *"'desktop EPCs', whereby someone visits the property to take photos (or this can even be done by the customers themselves) and emails the photos to an advisor sitting at a desk"*, who then prepares the assessment. Several suppliers suggested that consumers were unlikely to progress if advisors and assessors were too focused on the quantity of assessments they were delivering rather than the quality of service.

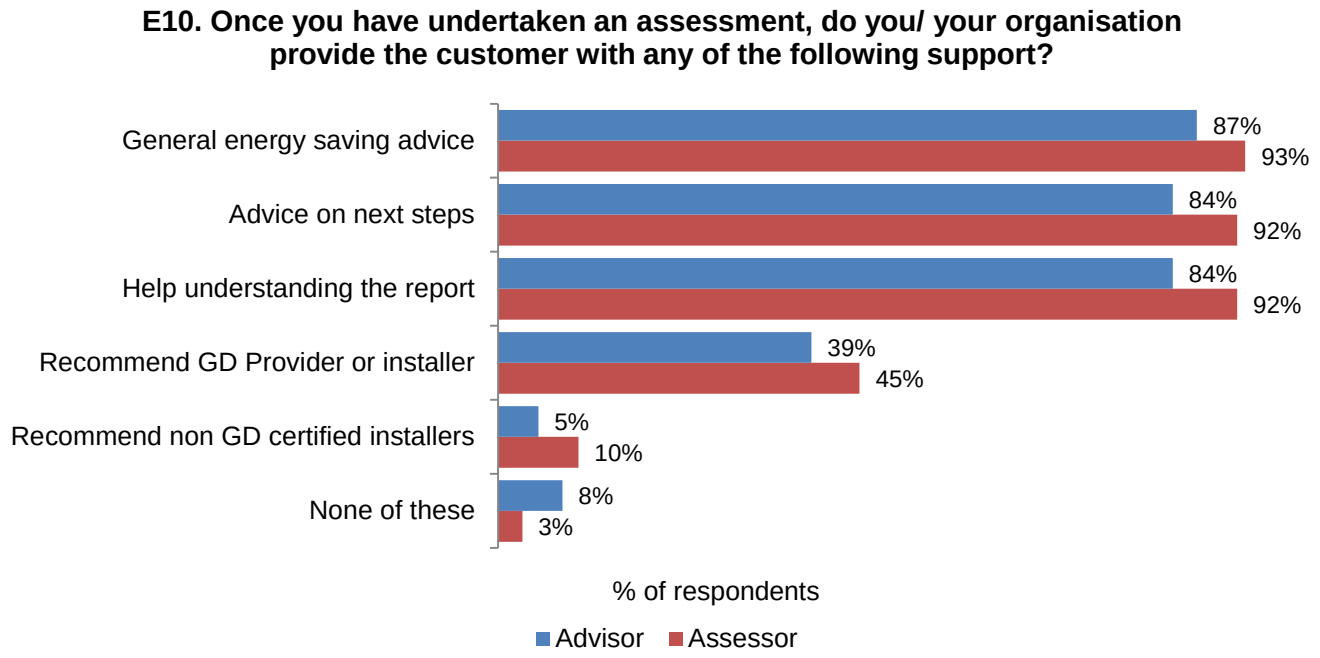
Support provided as part of a GD Assessment

5.15. As shown in Figure 5.4, advisors and assessors were asked whether they typically provided or expected to provide any other services or support in addition to the GD assessment (note that the provision of finance to customers is discussed below).

5.16. Almost all suppliers reported that they did, with just 8% of advisors and 3% of assessors indicating that they did not provide or expect to provide any additional support. Advice was provided by almost all advisors and assessors, covering energy saving advice, next steps following the assessment, and help with understanding the GDAR. Some 39% and 45% of advisors and assessors respectively indicated that would recommend a GD provider or GD installer to a customer.

5.17. Advisors and assessors reported that they provided or expected to provide much the same level of additional support regardless of whether or not they charged for assessments. Advisors that were employed by a GDAO were more likely to provide some form of support to customers than advisors that were sole traders (notably they were more likely to recommend a GD provider/ installer – 45% of advisors compared to 28%).

Figure 5.4: Whether advisors and assessors provided or expected to provider other forms of support during/ after the GD assessment process



Base: advisors delivering or planning to deliver GD assessments (167); assessors delivering or planning to deliver GD assessments (114)

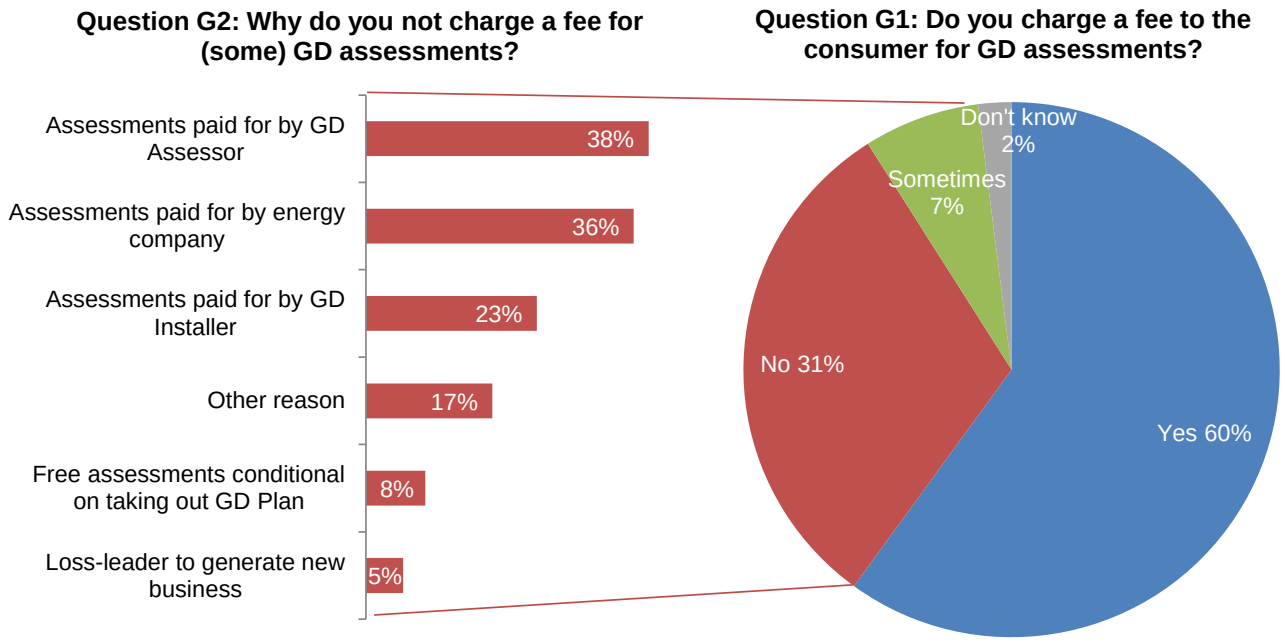
Charges for GD and ECO assessments

Whether advisors charged for GD assessments

5.18. As Figure 5.5 shows, the majority (60%) of advisors reported that they charged for GD assessments. Where they did not charge, advisors explained that this was typically because another organisation was paying for the assessment (most commonly this was paid for by a GD assessor organisation or by an energy company). A small minority of advisors (just 8%) offered free assessments if customers proceeded with a GD Plan. .

5.19. Advisors that were employed by a GDAO were significantly more likely to charge for a GD assessment than those that were sole traders (67% charged, compared to 46% of sole traders). Furthermore, advisors that undertook GD assessments in smaller volumes (defined as less than 100 at the time of interview) were more likely to charge than advisors that undertook assessments in larger volumes (more than 100), with 68% of the former charging compared to 48% of the latter.

Figure 5.5: Whether advisors charged for GD assessments, and of those that did not charge or only charged sometimes, why this was the case



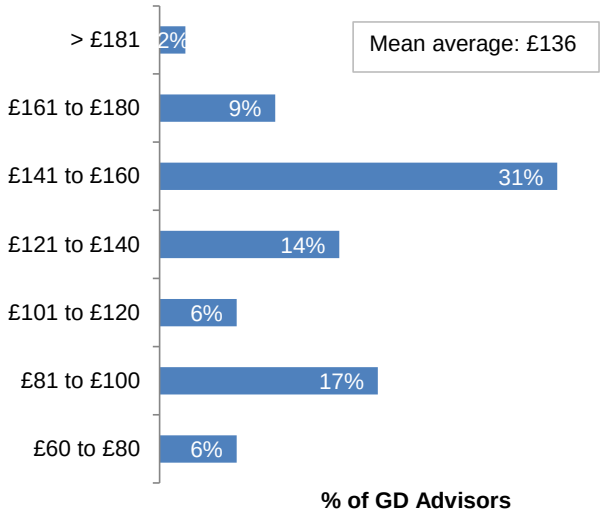
Base: Question G1 – advisors that have delivered GD assessments (122); Question G2 – advisors that don't or only sometimes charge a fee for a GD assessments (49) – note that this is a small base size and results should be used with caution.

The amount charged by advisors for GD assessments

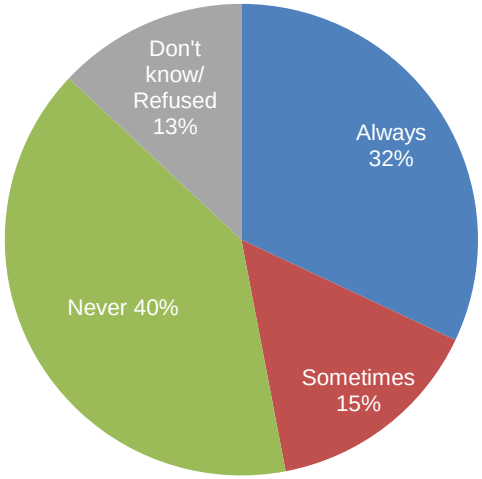
5.20. Advisors reported that the mean average price of a GD assessment was £136 (Figure 5.6). There was significant variation in advisors' fees, with around a quarter of advisors (23%) charging £100 or less. Some advisors varied their price according to whether the customer was a GD or ECO customer, with around a third (32%) of advisors reporting that they 'always' varied their price by the type of customer. There were no significant differences in fees charged depending on the characteristics of advisors (e.g. whether they were sole traders). As Figure 5.7 shows, the majority (67%) of advisors expected their GD assessment prices to remain the same over the next six months.

Figure 5.6: The amount charged for assessment by GD advisors, and whether this charge varied according to whether the assessment was for an ECO or GD customer

Question G5: When you do charge, how much do you charge for GD assessments?



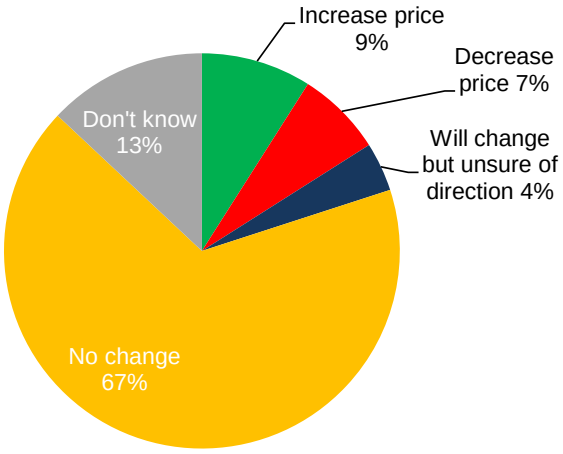
Question G12. Do your charges for GD assessments differ depending on whether they are for ECO or GD customers?



Base: Question G5 – advisors that charge and sometimes charge a fee for a GD assessments (65). Note: excludes don't know and refused answers (14%) so does not sum to 100%; Question G12 – advisors that deliver both Green Deal and ECO (106)

Figure 5.7: The proportion of advisors that expected prices to change in the next six months

Question G14. Do you expect your pricing for GD assessments to change in the next six months?



Base: advisors that have delivered GD assessments (122)

5.21. The qualitative interviews enabled assessment charges to be explored in greater depth. There was considerable variation in the charging structures and the cost of assessments amongst the sample of interviewees:

- Several advisors and assessors were offering free assessments, typically as part of the delivery of the ECO programme
- Some advisors and assessors were sub-contracted to deliver assessments on behalf of GD providers and installers. Such businesses charged GD providers and installers fees of between £70 and £100 for a GD assessment. The cost of the assessment to the end customer was set at the discretion of the provider or installer, though interviewees reported that it was typically in the region of £150
- Advisors and assessors that were working directly for consumers were charging between £99 and £175 for a GD assessment. In some cases, consumers were always charged the full fee, but in other cases the charge would be linked to whether the consumer proceeded with an installation (e.g. they would be refunded if they proceeded)

5.22. There was also some variance in the charges between rural and urban locations. advisors and assessors in rural locations were more likely to charge higher fees to cover the increased time and fuel costs associated with coverage of larger geographical areas.

5.23. Qualitative interviewees raised concerns about what they saw as very high fees being charged by other advisors and assessors. Several suppliers stated that they were aware of assessors using lack of awareness and understanding about the programme to 'deceive' customers into paying high prices for assessments on the basis that the assessment was a pre-requisite for receiving funded ('free') installations.

5.24. One assessor described their views of the charges for GD assessments as follows:

"We charge the customer a standard price for GD assessments of £99 – we chose that figure to match what [ ] was charging at the beginning. We think the transparency and simplicity of a single price is important and means the customer has more trust and faith in the system. However, we have heard of other companies charging £200-300 for an assessment and one case where someone was charged in excess of £300. While there is no set price and people can charge whatever they want, we think that the huge difference in price for the same service could be damaging to GD/ECO."

GD assessor, provider and installer

The provision of help regarding finance

Whether GD suppliers provided help with finance

5.25. Assuming that a customer was not paying for an installation themselves (e.g. using savings), some form of finance would be required. Financial options include: ECO funding (potentially in combination with other finance); credit arranged by the customer (e.g. via a credit card or remortgaging); GD finance (if the installation was carried out via the framework of a GD Plan); or a personal loan. Customers may also be able to access GD cashback to refund installation costs.

5.26. Advisors and assessors were asked if they provided or intended to provide any help with the arrangement of finance or credit after completing a GD assessment. Installers were asked a similar question: did they help to arrange credit or finance options for their GD customers? Findings from these results are shown in Figure 5.8, which shows that a minority of each type of GD supplier (ranging from 17% of advisors to 25% of assessors) reported that they provided customers with help with finance and/or credit.

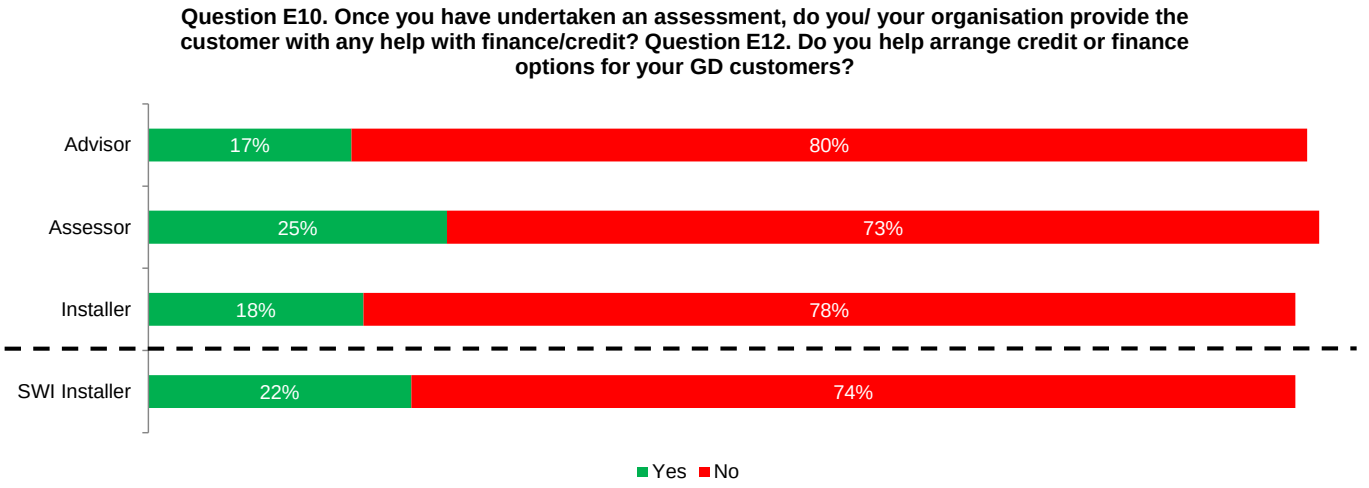
5.27. However, readers should note that there is some uncertainty as to how survey respondents defined 'help with finance/ credit' in the context of this question, and thus whether there was consistency across all respondents. For instance, 'help with finance/ credit' could be defined as: providing general advice[29] (discussing why finance was needed); signposting (identifying possible sources of finance); or actually brokering or providing finance to customers. It is possible that survey respondents may have interpreted the term 'help with finance/ credit' in different ways.

5.28. To investigate this potential for measurement error, the ICF International study team cross-referenced survey data against the results of the 28 qualitative interviews with survey respondents. The qualitative research sample included a mixture of businesses that had answered 'yes' to the survey question regarding the provision of help with finance/ credit, and also businesses that had answered 'no'. In almost all cases, survey respondents that indicated that they provided help with finance explained in the qualitative interviews that they brokered or arranged finance for their customers. In a couple of cases, qualitative interviews indicated that survey respondents that had indicated that they provided 'help with finance/ credit' had actually been referring to holding general discussions about potential finance options with customers, without brokering finance.

5.29. Cross-checks thus did not find evidence of widespread variations in interpretations of the survey question concerning the extent of provision of help with finance. However, readers should still treat the results shown in Figure 5.8 with some caution since it may be the case that some survey respondents who indicated that they provided help with finance/ credit were actually talking about the provision of advice (thus it may be the case that slightly fewer than 17%-25% of respondents actually arranged finance). Moreover, it should be noted that the 73%-80% of GD suppliers in Figure 5.8 that indicated that they did not provide 'help with finance' might still have provided some form of advice (e.g. signposting) about financial options. For example, as shown in Figure 5.4, 39% and 45% of advisors and assessors respectively indicated that they would recommend a GD provider to a customer, a process that would be likely to involve some discussion of finance/ funding options given the role of a GD provider (which includes providing GD finance).

[29] Note that the term 'advice' is used in a general sense

Figure 5.8: Whether suppliers provided or intended to provide help with finance and/or credit for their customers[30]



Base: GD suppliers delivering or planning to deliver GD assessments or installations – advisors (167), assessors (114), installers (323), SWI installers (122); Note: excludes don't knows (which ranged from 0-2%), so does not sum to 100%

5.30. As noted above, qualitative interviews included examples of advisors and assessors that indicated that, whilst they did not actually provide or broker finance, they did discuss finance options with customers. This process involved discussions of all possible finance options, typically carried out as part of the assessment process. For example, one GD advisor reported that they believed they were obliged under the GD Code of Practice to offer clients information about all available options when providing information about finance (*"we are making sure that the client receives all the options at the same time…so that they can make an educated choice"*). Some interviewees also reported that they might identify (without recommending) specific installers and/or GD provider(s) that customers could contact in order to arrange finance.

5.31. Qualitative interviews with GD suppliers also discussed their reasons for *not* providing customers with help with finance, which included:

- *A perception of potential conflicts of interest*: several advisors and assessors believed that the provision of advice about finance would conflict with their role in providing an independent service to customers in identifying energy efficiency needs
- *Concerns about their ability to provide financial advice*: qualitative interviews found examples of businesses that had concerns about the complexity of providing financial advice (including several sole traders). Financial advice was often seen by these advisors and assessors to add complexity to the assessment process (*"it's just more paperwork and more aggro"* according to one advisor). One installer described their reason for not providing/ brokering credit to consumers as follows:

"We did look into it in the beginning. We looked into getting a consumer credit licence and that was easy enough to get but it was the other aspects that were involved and the actual paperwork that goes with managing it and ensuring that it's done in the correct manner and we were uncomfortable at the time to actually take that onboard".

[30] Note that E10 was asked to GD Advisors and GD Assessor organisations, whereas E12 was asked to GD Installers.

The types of credit or finance options offered to customers

5.32. As part of the quantitative survey, the GD suppliers that indicated that they provided their customers with help regarding finance/ credit were asked to identify the finance that they offered to customers[31]. Qualitative interviews with a small sub-sample of suppliers that reported that they provided finance[32] also explored this issue in more depth. Note that this question concerned the act of recommending, brokering or directly offering finance to customers, rather than GD suppliers simply listing potential finance options (i.e. the provision of information). Due to the small base sizes within the quantitative survey[33] the results have been analysed qualitatively.

5.33. The finance/ credit offered to customers by GD suppliers included the following (note the provision of GD cashback is discussed separately below):

- GD finance, as part of a GD Plan. Qualitative interviews included GD suppliers that provided GD finance themselves (where they were also accredited GD providers), and also suppliers that had "arrangements" in place with one or more GD providers whereby they would point customers towards a specific provider(s) to discuss GD finance (amongst other options). According to one qualitative interviewee:

"We partner with one of the big providers at the moment. So we do the assessments and send the information to the provider. The provider has a network of installers who go out and quote and will either push it through ECO, create a GD Plan, or provide other forms of finance"

GD assessor

- Third-party finance, which included credit unions (often locally focussed) and other providers of personal loans (e.g. Barclays and Hitachi). For example, businesses that were included in the qualitative research noted that they had set up arrangements with loan providers who would provide customers with a personal loan to pay for an installation following a GD assessment (e.g. one advisor/ assessor business reported that a local credit union would provide a personal loan at an interest rate of 2% and an administrative charge of £5)
- ECO funding. Where GD suppliers had access to ECO funding they were able to offer this to customers (though it was often the case that customers' eligibility for ECO funding had been identified in advance, in which case they might not have gone via the GD assessment route)

5.34. Qualitative interviews highlighted the extent to which suppliers would review possible finance options with customers, and on the basis of this decide what was the most appropriate approach (which was also informed by the range of credit sources that were available to the supplier). It was noted by some interviewees that they needed to be in a position to offer a range of types of finance due to the difficulties that some customers experienced in securing sufficient GD finance to fund the entirety of an installation 'package' via a GD Plan. As one installer noted:

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[31] Question E13: What credit or financial options to you offer to your Green Deal customers? Note that this question was only asked of survey respondents that had previously indicated that they did provide help with finance/ credit

[32] A total of 14 GD suppliers

[33] Base: advisors (27), assessors (29) and installers (58)

"We have developed a financial package in response to a GD assessment, but were very disappointed. The customer wanted to install a gas boiler and solar PV and met the Golden Rule. The job was priced at £12,000 but GD finance was only able to cover £2,000, leaving a difference of £10,000 which had to be met through a separate loan. It was all very complicated"

GD installer

Suppliers' views on GD incentives

5.35. Qualitative interviews asked suppliers about their views of the GD incentives (including the recent changes to cashback offered after 13 December 2013).

Benefits of cashback

5.36. Most suppliers felt that cashback had been an effective incentive for customers and several described cashback as being effective in helping to close the gap in terms of funding shortfalls through either GD or ECO. One assessor had recently invested in an advertising campaign focusing on the cashback element *"the campaign has had a huge impact. In the first month we had 8,000 hits to the website. We also created some 'cashback' brochures which we sent out to those registering interest on the website and followed that up with a phone call. During the first month we managed to book 400-500 GD assessments."*

Issues with cashback

5.37. Several suppliers believed that an issue with the use of cashback was the requirement for customers to raise the funds to pay for an installation before they could recover these costs via cashback. Thus, it was reported, if GD finance or ECO funding was not sufficient to cover the full cost of an installation and a customer was unable to raise other sources of finance, then the cashback could not be used even if it was a sufficient level to cover the shortfall (none of the interviewees reported that they would charge customers after installation was complete and cashback secured in order to overcome this problem).

5.38. Some suppliers suggested that there were issues with consumer awareness and understanding of cashback, with suppliers finding it difficult to explain and sell to customers. One installer stated that *"customers don't seem to know anything about it [cashback]",* while another installer found that the rules excluding the use of cashback in combination with ECO were *"too confusing"* for customers.

5.39. However, awareness and understanding were not only issues for consumers as some suppliers (advisors and installers) stated that they were unaware of GD cashback or did not feel they had sufficient knowledge of cashback and how to access it to be able to offer it to consumers. For example, as noted by one installer "*Green Deal cashback, we don't even understand that and none of the providers seem to be offering it to us*".

5.40. It was also suggested that the costs associated with accessing the cashback from GD providers, in addition to the requirement for a post-installation EPC, meant that suppliers needed to charge additional fees when customers accessed cashback. For example, an SWI installer stated that customers were *"getting their £4,000 [cashback] but hidden within the quotation is a £250 charge for access to cashback and a further £90-£120 for a post-installation EPC which is a requirement of the cashback."* The installer also suggested that cashback *"can be difficult and expensive to access and it might be easier to actually become a GD provider ourselves."* The installer suggested that some GD providers may charge up to £500 to process a cashback claim, while other providers will only offer cashback for leads that they have generated themselves , rather than leads

generated by an installer: *"I had to find a provider who was willing to offer GD Cashback for projects that I was bringing to them and that proved difficult."*

5.41. A certified assessor, provider and installer mentioned the implication of EU state aid regulations on the cashback incentive. The state aid cap for social landlords is restricted to a maximum of £160,000 over a rolling three year period from all sources[34]. The respondent suggested that they would like this cap to be removed or raised in order to unlock a lot more SWI work.

5.42. Interviewees also mentioned the differences in cashback incentives and levels offered in England and Scotland and wanted to be able to provide the incentives on offer in the other country. For example, a Scottish assessor was disappointed at not being able to offer the new cashback of up to £4,000 for SWI, while an English assessor wanted to be able to offer cashback for other measures such as LED lighting, as available in Scotland.

New cashback rates

5.43. Interviewees were more positive about the new cashback rates, announced in February 2014 and which could be retrospectively redeemed back to 13 December 2013. Awareness and understanding were still an issue for some but there was a lot more support for the higher rates of cashback, particularly those associated with SWI, which was described as "*a fantastic scheme*" and "*a particularly good offer*". One installer stated that: *"We're offering cashback to everyone now for all kinds of measure"*. However, there was concern that if the cashback was linked to Stamp Duty Land Tax, the incentives would not be relevant for all areas and would be focused on areas with high house prices, such as London and the South East, where people are more likely to be able to pay the full cost of installations themselves.

5.44. Some felt cashback was becoming more attractive to customers, because the increased levels of cashback had coincided with a decline in the availability of ECO funding, but also which meant cashback had become the best deal available for a lot of customers. One installer suggested that *"since the change to ECO funding and the reduction in the price of carbon, it's much more cost effective to be able to offer GD cashback to customers than it is to offer any kind of ECO funding".*

5.45. Others were disappointed that the increased levels of cashback could no longer be used with ECO funding, particularly amongst SWI installers who had previously been delivering large volumes of SWI installations through ECO in combination with the £650 of SWI cashback per property. Several SWI installers stated that, despite the increase in SWI cashback to £4,000 per property, the overall level of funding available was likely to fall, regardless of whether the customer was using ECO funding or GD cashback, because of the proposed changes to ECO.

Suggested improvements to cashback

5.46. Suggested improvements to GD incentives tended to focus on further extensions to the duration and coverage of the cashback, or simplifying the schemes and reducing administration for suppliers and customers to increase demand. There were also suggestions that cashback should be paid directly to the GD provider, with the customer's permission, rather than paid to the customer. One installer stated *"this is really important to enable customers to use the cashback to pay back some of the loan immediately and reduce the overall size of their loan accordingly"*.

5.47. Others suggested that cashback should be scrapped altogether and cashback funds could be used more effectively by being targeted at those who really need it, rather than

[34] UK Government guidance on state aid rules is available from www.gov.uk/state-aid

giving rebates. According to one installer: "*the money may be better off being invested as grants….rather than giving cashback, just put the money into the schemes so that they can target people that are pensioners or disabled, etc. or those who don't qualify under ECO*".

6. Installers under Green Deal and ECO

This chapter provides analysis of GD installers, focussing on 'service offers' and whether this has changed as a result of their involvement in GD. It also looks at any delays experienced by installers as part of the installation of measures under GD

Key messages

- 'Conventional' heating measures (boilers) were the measures that installers most commonly offered (71% of installers installed such measures). Around half (51%) of installers installed renewable energy products, and 37% installed insulation measures. This suggests that there was a degree of 'specialisation' or concentration amongst installers. This was particularly true of new market entrants (installers established since 2011), where 44% only offered a single measure, and around two thirds (63%) only offered measures within a single market 'segment' (i.e. conventional heating, insulation or renewable energy products).
- Most of the installers that pre-dated the GD did not change the range of measures that they provided in response to becoming part of the GD/ ECO supply chain. Where they did, new types of insulation were the measures that were most commonly added to their service offer.
- Most installers reported that they had carried out or expected to carry out GD/ ECO installations on behalf of another organisation, with GD providers the most commonly identified type of organisation. SWI installers had often carried out, or expected to carry out, installations on behalf of local authorities (48%) or housing associations (44%). Slightly over half (59%) of all installers had established or expected to establish at least one new relationship with another supplier.
- Two thirds of installers (68%) reported that they had experienced delays when carrying out GD installations. Delays that were commonly identified by installers included: problems in securing finance to fund the installation[35]; difficulties in identifying/ securing a GD provider; and/or delays in preparing GD Plans.
- Around a third of installers (30%) reported that they had considered becoming GD providers. The complexity of providing finance to customers was the most commonly identified reason why they had not proceeded (an issue for 70% of installers that considered becoming a GD provider), and 64% of this group of installers noted that the complexity of the accreditation process was a barrier. A quarter of installers that considered becoming a GD provider noted that 'other'

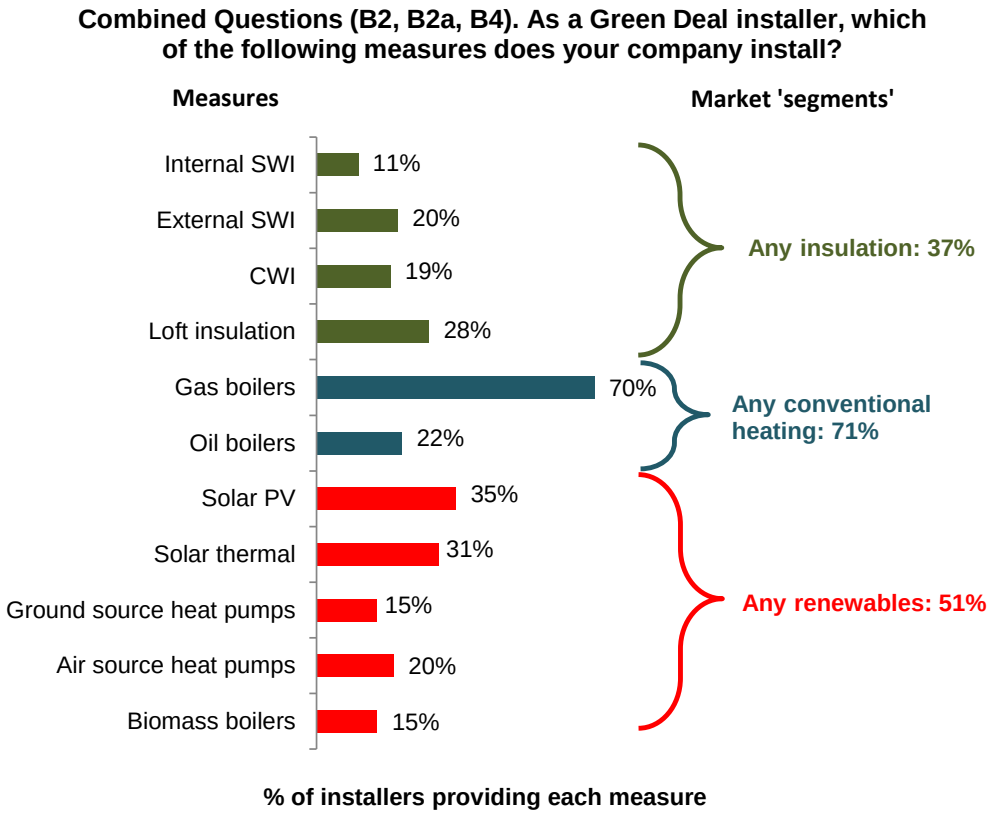
[35] Note that 'delays securing finance' was the option given in the questionnaire; it is thus not known whether survey respondents were referring to delays experienced by customers in securing finance, or delays that they themselves had experienced in securing finance

factors had been a deterrent, which included wider doubts about the GD 'model', such as the GD finance interest rate; lower than expected demand under GD; and uncertainty about future of the GD and ECO programme.

Current service offers of installers

6.1. Figure 6.1 shows the measures that installers indicated that they offered at the time of interview (January/ February 2014). 'Conventional' heating measures (boilers) were the most commonly offered (by 71% of installers), with gas boilers by far the most frequent measure available (provided by 70% of installers). Around half of installers offered some form of renewable measure (51% of the total), and just over a third (37%) offered some form of insulation (loft insulation was the most common).

Figure 6.1: Measures installed by registered GD installers



Base: All installers (426)

Specialisation and diversification in service offers amongst installers

6.2. Further analysis of the measures offered by installers was undertaken in order to explore the extent to which they focussed on single measures (only one of the measures shown above in Figure 6.1) or multiple measures (more than one measure, for instance loft insulation and SWI). The data suggest that, at the time of interview, 35% of GD installers were delivering a single measure[36]. Some 63% of installers were delivering multiple measures; 51% were delivering multiple measures from within a single market segment (i.e. insulation, conventional heating or renewable energy products), and 47% were delivering multiple measures from multiple market segments.

[36] Base: All installers (426)

6.3. As Figure 6.2 shows, at the time of survey, around a quarter (27%) of the installers that pre-dated the launch of GD focussed on the installation of a single measure (e.g. gas boilers). This compared to 44% of installers that were established after 2011, suggesting that newer installers were more likely to concentrate/ specialise in the installation of a particular measure. There is some evidence that installers that pre-dated the GD have become slightly more diversified in terms of the range of measures that they install (see below for further discussion of this point). The proportion of these installers that installed measures from multiple market segments increased slightly from 55% before GD/ ECO to 60% now.

Figure 6.2: Delivery of single and multiple measures and market segments

		Installers established before 2011		New installers (established after 2011)
		Before GD/ECO	At time of survey	
Measures	Single	29%	27%	44%
	Multiple	71%	73%	51%
Market segments#	Single	45%	40%	63%
	Multiple	55%	60%	32%

Base: installers with relevant experience and established before 2011 (220) and installers established after 2011 (206); Note # segments are groups of measures: insulation, conventional heating, or renewable energy products, as shown in Figure 6.1

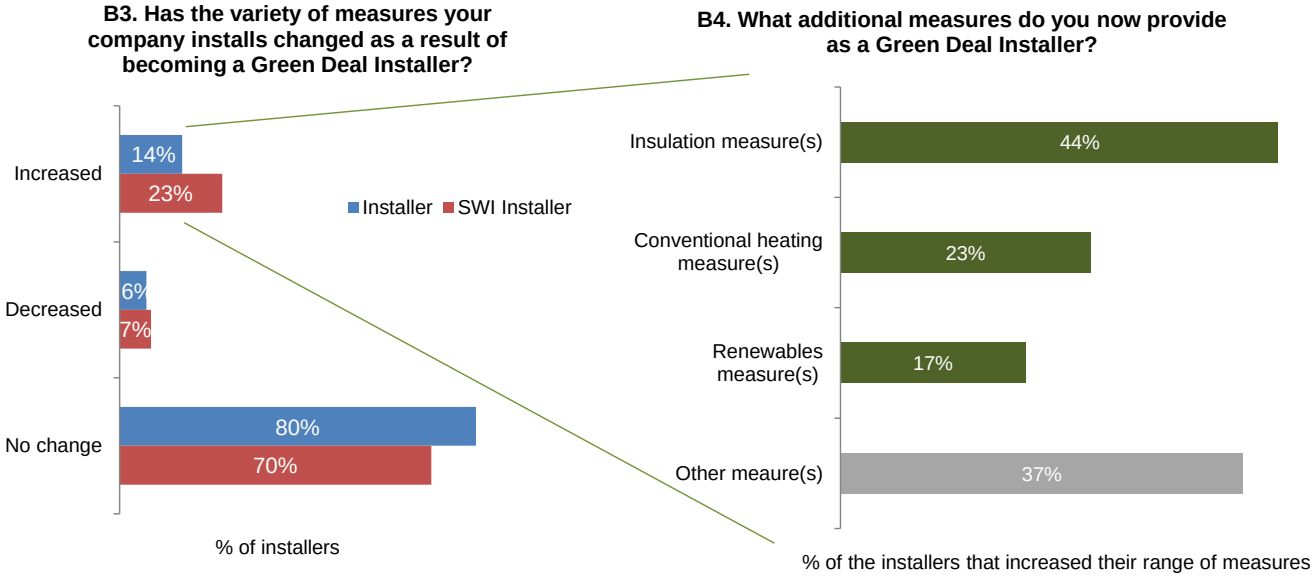
Influence of GD/ ECO on installers' service offers

Change in installers' service offers due to GD/ ECO

6.4. Those installers that pre-dated the launch of GD and/or ECO were asked whether participating in GD and/or ECO had had any impact on the range of measures that they install (the left chart in Figure 6.3). The majority of installers (80%) reported that there had been no change to their service offer as a result of GD and/or ECO. The remainder either noted that they had added new measures (14%) or stopped installing measures (6%) as a result of GD and/or ECO.

6.5. The installers that reported that they had added new measures as a result of becoming part of the GD and/or ECO supply chain were asked to identify these measures (the right chart in Figure 6.3). Some form of insulation was the most commonly added measure (mentioned by 44% of installers that had increased their range).

Figure 6.3: Whether the range of measures offered by installers changed as a result of GD and/or ECO, and if so what new measures were added



Base: Question B3 – installers with relevant experience and established before 2011: installers (220), SWI installers (64); Note: excludes don't knows (1-2%). Question B4 – installers increasing the variety of measures installed as a result of GD (33); Note: excludes don't knows (8%) and due to small sample size, for question B4 it was not possible to present data for SWI installers

Evidence of competition under GD/ ECO

6.6. Qualitative interviews asked installers about changes in competition under GD/ ECO. Some installers felt that the market had become more competitive following the introduction of the GD and ECO programme. It was noted that there have been many new entrants to the market as well as consolidation of suppliers and increased use of sub-contractors. Several interviewees from smaller businesses suggested that the GD and ECO programme favours larger businesses that can deliver assessments and installations on a larger scale and are better placed to absorb fluctuations in demand and cash flow, deal with the increased paperwork, certification and compliance requirements, and take on greater levels of risk. Interviewees made the following observations in respect of the nature of the market:

"One man bands are never going to be able to do it…because of the paperwork, the need for pre and post job assessments, lodging of the paperwork, etc.…you need at least two people in an office to take care of all the paperwork".

GD installer

6.7. Interviewees also suggested that installers were now prepared to travel further; were marketing more heavily; and were increasing the range of services that they offered. One installer reported getting "*rid of partners and sub-contractors who don't do the jobs in a compliant way*", while another stated that *"there has been some increase in competition as more reputable companies are now getting involved, which means everyone has to raise their game."*

Evidence of innovation under GD/ ECO

6.8. Qualitative interviews found few examples of innovation in the market, beyond implementing systems and processes that were required in order to become certified. Some installers had added new measures to their offer as a result of the GD and ECO programme, but this tended to involve extending their offer rather than introducing innovative products or processes. That said, examples of innovation in the market related to the introduction of new technology to enable advisors to lodge assessments and create GDARs while still at the property. This increased the speed of the assessment process and enabled advisors to explain the report to customers and provide additional advice and support without the need for a second visit to the property.

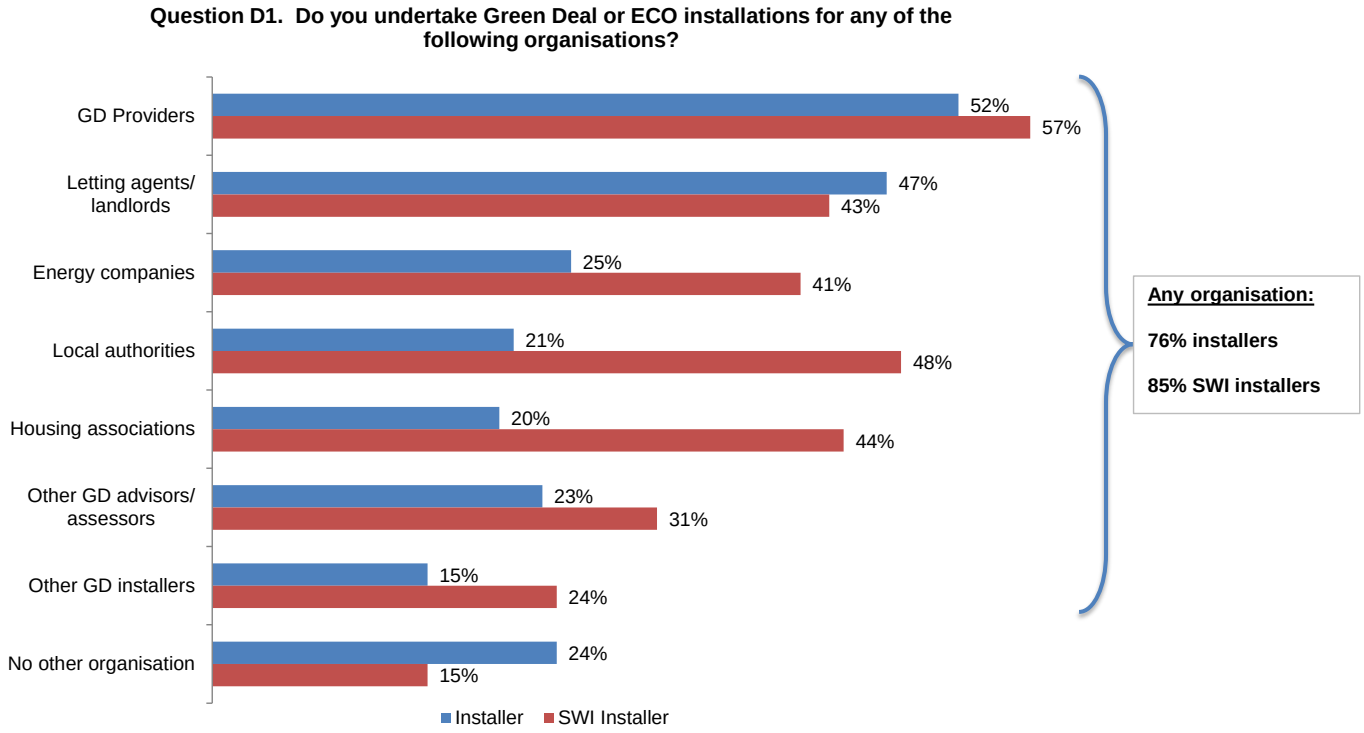
Installations carried out for other organisations

6.9. GD installers were asked whether they had undertaken or expected to undertake any installations under GD and/or ECO on behalf of a selection of organisations, (Figure 6.4). The majority of installers that were delivering or planning to deliver under GD/ ECO (76% of all installers and 85% of SWI installers) had carried out, or expected to carry out, an installation for another organisation.

6.10. Just over half (52%) of installers had carried out or planned to carry out installations for GD providers, the most commonly mentioned organisation. SWI installers were significantly more likely than installers as a whole to have installed or expected to install measures on behalf of: energy companies (41% of SWI installers); local authorities (48% of SWI installers); and housing associations (44% of SWI installers).

6.11. Larger installers were more likely than smaller installers to have established or to expect to establish relationships with other organisations (86% of medium/ large sized installers, compared to 71% of micro-sized installers). installers that installed a wider 'portfolio' of measures were also more likely to have established or to expect to establish linkages with other organisations in order to deliver GD and/or ECO (81% of installers installing multiple measures, compared to 66% of installers offering just a single measure).

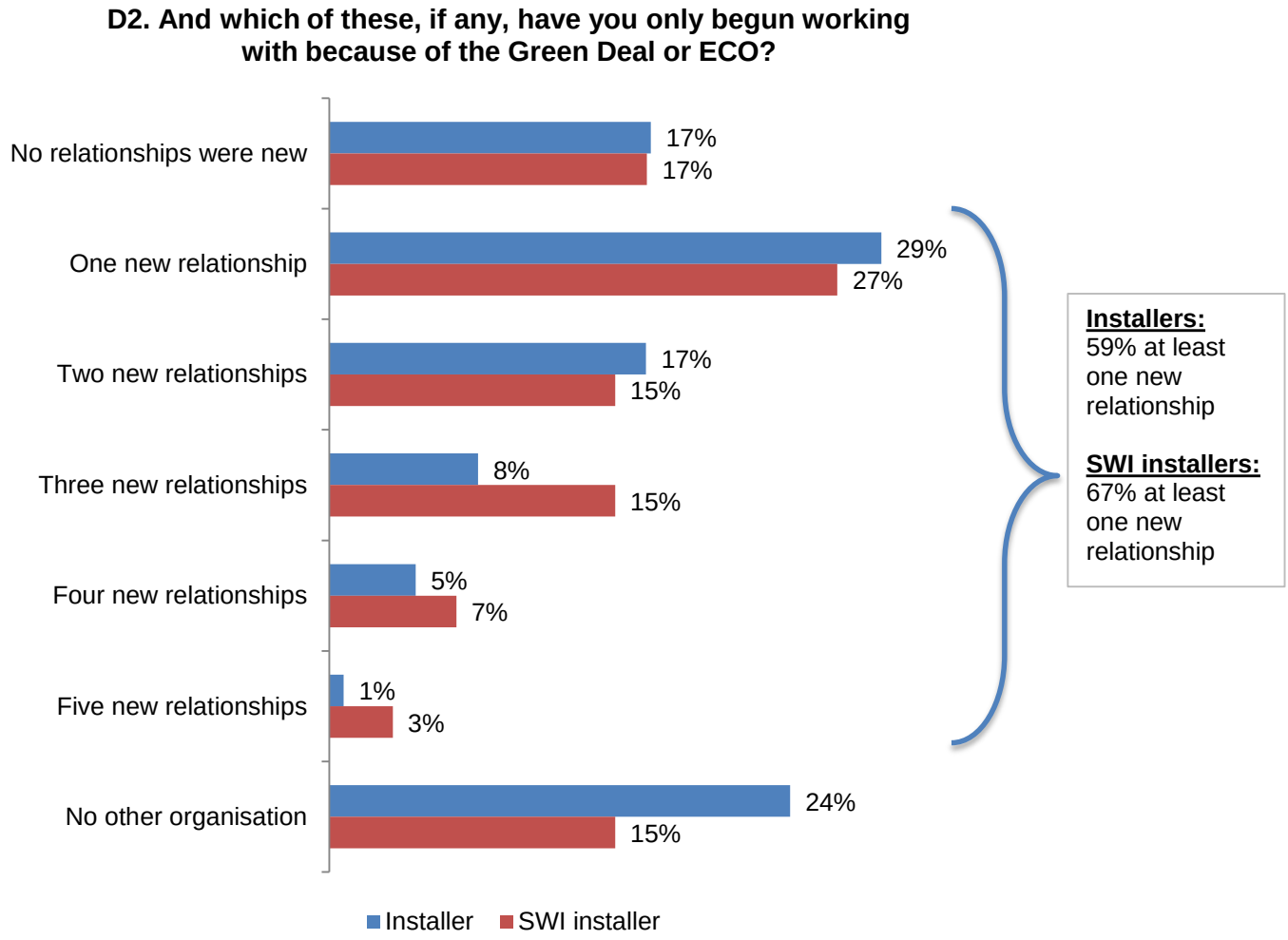
Figure 6.4: Whether installers had delivered or planned to deliver GD installations for other organisations



Base: those delivering or planning to deliver GD and/or ECO – installers (402), SWI installers (147)

6.13. Installers were asked whether any of these relationships with organisations were or would be new; that is, established as a result of GD and/or ECO (Figure 6.5). Amongst those installers that had delivered or were planning to deliver installations under GD and/or ECO, 59% had established or were expecting to establish at least one new relationship with another organisation. Some 31% had established or were expecting to establish multiple new relationships as a result of delivering under GD/ ECO. New relationships with GD providers and installers were the most common, with 42% of installers that had delivered or were planning to deliver installations under GD and/or ECO indicating that they had established or were expecting to establish new relationships with these organisations.

Figure 6.5: The number of new relationships with other organisations established (or expected to be established) by installers as a result of GD and/or ECO



Base: those delivering or planning to deliver GD and/or ECO – installers (402), SWI installers (147)

6.14. Qualitative interviews found examples of installers that were working with a broad range of partners, including GD providers, energy companies, manufacturers, advisors and assessors. Many of these were pre-existing relationships that had been established prior to the GD and ECO. Most interviewees were happy with these relationships, and installers tended to have experienced fewer problems with partners than the advisors and assessors. However, some had experienced problems, such as working for businesses that had gone out of business or left the GD/ECO market, not receiving any referrals or work opportunities, or being paid late (or not at all) for work undertaken. For example, one installer had initially been told that they would be paid by their GD provider

in two weeks, but *"payment took 60 days at least and we had to continually phone them…I was out of pocket for probably longer than 60 days…it was ridiculous."*

6.15. As a result of these problems and concerns, several installers reported being cautious, and/or having strict assessment processes to select partner organisations. One installer, working with GD providers, advisors and assessors, stated that: "*some [partners] are more reputable than others. We identify potential partners through the ORB and then make contact but also receive enquiries from other suppliers too. It is difficult to know how to choose partnerships… it is all a bit 'trial and error' really. Recommendations through word of mouth are probably the best way of finding reliable partners. We also have our own simple vetting process depending on how easy people are to get hold of, whether they respond in a timely manner, and so on*".

6.16. Another installer stated that "*all of our* [partners and subcontractors] *must be PAS2030 certified, and have to go through a 'due diligence' process before the company decides to work with them* [on GD and non-GD work]*. We deliver on-site training, training on paperwork; and practical training that shows the level of quality expected from jobs carried out on our behalf.*"

6.17. Relationships with advisors, assessors and particularly GD providers were more likely to have been set up following the introduction of GD and ECO, and the GD ORB was the main source for identifying these new contacts. Most installers were working with multiple GD providers in order to maximise opportunities under the programme:

"If you work with just one [GD provider] it's a case of too many eggs in one basket… if their funding stops you've had it"

GD installer

"I've spoken to all of the providers and generally I deal with the ones that have shown the most knowledge…been the most helpful. I purposefully steer clear of what I call the 'big boys'... there's no reason to use them as a provider… I try to use providers that are a bit more smaller… the ability to get hold of [larger GD providers] *was very difficult…. just to pick up the phone and talk to somebody and I was being passed from pillar to post… it just got frustrating so I just dealt with those where you could get through to someone straight away."*

GD assessor and installer

6.18. Some installers raised issues of working with GD providers, which included: the costs and time associated with GD provider's own registration procedures; the different processes, systems and software; and the fact that installers only receive payment once the funding has been arranged and they have met all of the GD providers' demands and they therefore bear the risk of not being paid for jobs.

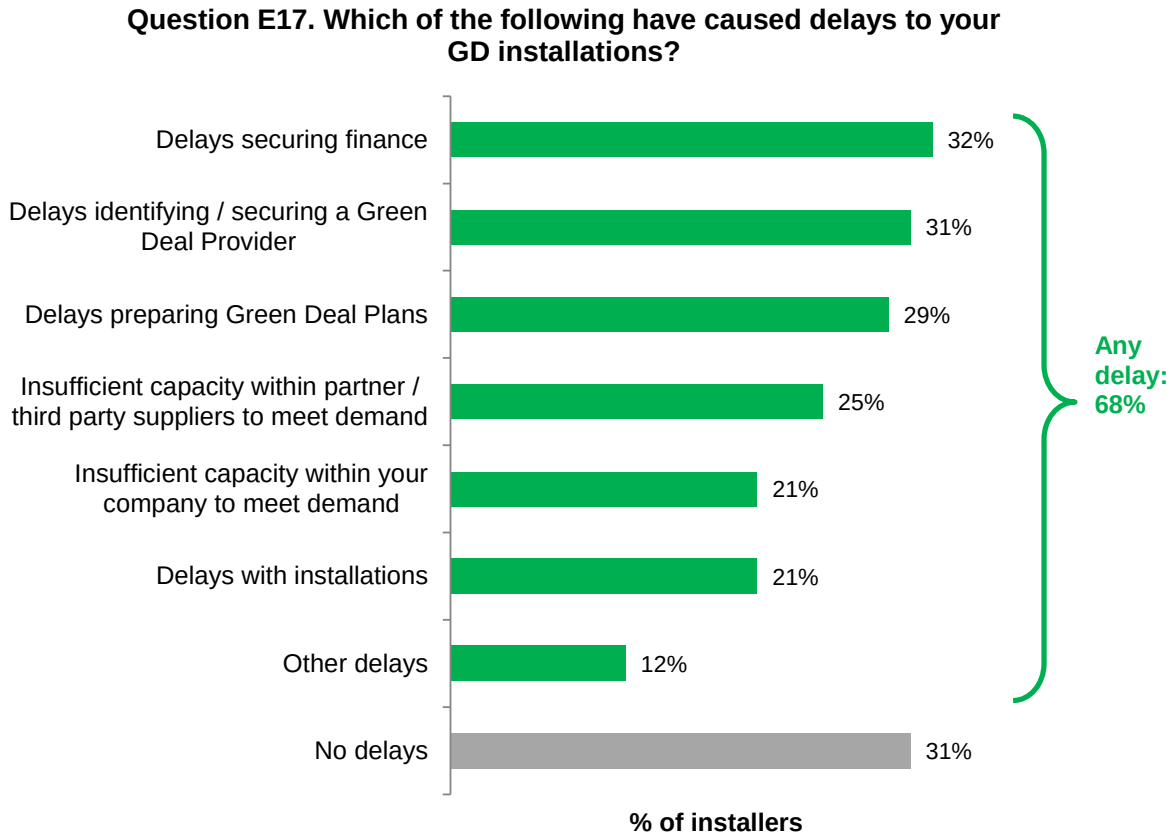
"We had to [register with providers]. That's not a five minute thing anymore. It's not a case of, yes, we'll send you an enquiry. It's a week and sometimes a week and a half or two weeks' work of PQQs, etc. For example, [ ] *insist that you join Achilles which is a form of PQQ - a system of storing information online. And it's not as simple as it sounds. It's time consuming. It's monotonous. It's a repeat of information in different formats really."*

GD installer

Delays experienced by installers when installing measures under GD

6.19. Those installers that had installed measures under GD were asked whether they had experienced any delays and, if so, what had caused these delays (Figure 6.6). Two thirds (68%) of installers that had installed measures under GD had experienced some kind of delay. 'Securing finance'[37] was the most common cause of delay (mentioned by 32% of this sub-group of installers). A third of this sub-group of installers (31%) reported that they had experienced delays due to difficulties that the customer had experienced in identifying and/or securing a GD provider. Relatedly, 29% of this sub-group of installers had also experienced delays caused by the preparation of GD Plans.

Figure 6.6: Reasons for delays (if any) to GD installations



Base: installers that had installed measures under GD (78); Note: excludes 'refused' (equal to 2%); no disaggregation by SWI installers was possible due to small base size (36)

[37] Note that 'delays securing finance' was the option given in the questionnaire; it is thus not known whether survey respondents were referring to delays experienced by customers in securing finance, or delays that they themselves had experienced in securing finance

Whether installers had considered becoming GD providers

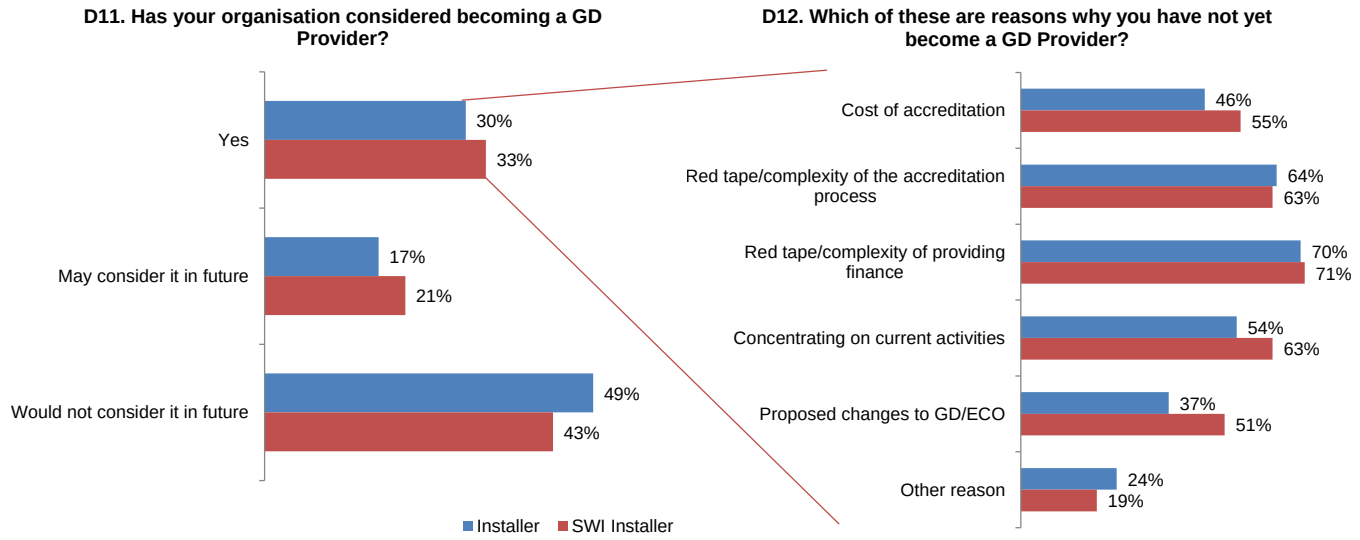
6.20. Installers were asked whether they had considered becoming GD providers, and if so what had happened (the chart on the left in Figure 6.7). Excluding those installers that were already registered GD providers[38], around a third (30%) of installers indicated that they had considered becoming a GD provider. Around half (49%) of installers reported that they would not consider becoming a GD provider.

6.21. Cross-tabulation analysis indicates that some installers were significantly more likely to have considered becoming a GD provider (all percentages express the proportion of installers that had considered the GD provider role), including those that had:

- Participated in CERT/ CESP (39% compared to 27% of non-participants);
- Helped to arrange finance for consumers (51% compared to 28% of installers that did not help to arrange finance);
- Been founded to serve the GD/ ECO market (41% compared to 25% of those that pre-dated the launch of the GD and ECO programme);
- Were entirely dependent on GD/ ECO for income (57%, compared to 19% of those that derived less than 10% of their turnover from GD and/or ECO).
- Delivered large numbers of GD/ ECO installations (54% of installers that had done over 100 installations, compared to 27% of those with less than 100).

6.22. Those installers that had considered becoming GD providers were asked why they had not proceeded (the chart on the right in Figure 6.7). The complexity of providing finance was the single most common reason (70% of this sub-group of installers). The complexity and cost of accreditation as a GD provider was also identified as a deterrent by many installers.

Figure 6.7: Whether installers had considered becoming GD providers, and if so what had happened



Base: Question D11, installers that are not GD providers – installers (367), SWI installers (131); Note: excludes don't knows (2-4%). Question D12, installers that have considered becoming GD providers – installers (109), SWI installers (44)

[38] Out of the 1,967 installers (as at October 2013), GD ORB data indicates that 53 were also GD providers

7. 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 evaluation questions outlined in Chapter 1.

What is the scale of current and expected future levels of activity and demand under GD and/or ECO? What is the likelihood of suppliers staying in the GD and/or ECO market?

Delivery of GD assessments under GD/ ECO

7.1. Most of the individuals/ businesses that were registered as GD advisors or assessors had, at the time of the survey, delivered GD assessments (whether as standalone assessments, or connected with ECO-funded installations). Survey data points towards a 'skewed' GD assessment market. There were large numbers of advisors and assessors that had carried out relatively small numbers of GD assessments. A quarter of advisors had carried out six or fewer assessments, and a quarter of assessors had carried out 20 or fewer assessments. Relatedly, evidence suggests that large numbers of GD advisors and assessors generated a minority (often under 10%) of their income through GD and/or ECO. At the other end of the scale, small numbers of assessors had completed thousands of GD assessments.

Delivery of installations under GD/ ECO

7.2. Just 16% of registered installers had delivered installations through GD. Evidence suggests that, instead, most of the installation activity undertaken by registered GD installers was funded through the ECO programme, or took place outside of GD/ ECO altogether. A quarter of installers had, at the time of survey in January/February 2014, not undertaken any GD or ECO installations, despite being registered as GD installers. Limited demand was a key explanation that was given by installers as to why they had not delivered under GD.

Demand under GD/ ECO

7.3. The vast majority of advisors, assessors and installers reported that demand under GD had been lower than they had initially expected (low demand was the most commonly cited reason as to why installers had not carried out any installations under GD). Suppliers were also uncertain about the likely direction of change over the remainder of 2014. Whilst many (between 40% to 50%) advisors, assessors and installers expected demand under GD to increase (albeit from a lower-than-expected base), others expected demand to remain the same or even decrease further.

7.4. Most advisors, assessors and installers reported that demand under ECO had been lower than expected. There was uncertainty amongst suppliers about the direction of change as regards demand under ECO in 2014. A sizeable proportion of survey respondents (30% to 40% of each type of supplier) believed that demand under ECO would decrease, and also that the proposed changes to ECO that were announced in the 2013 Autumn Statement were a cause of this anticipated reduction in demand (particularly SWI installers, many of whom believed that proposed changes to CERO targets would mean that the energy companies could commission less SWI work).

The likelihood that installers would retain their certification

7.5. Evidence from installers[39] suggests that around three quarters were planning to maintain their GD installer certification over the next 12-18 months, whilst some 15% were not. Given the lack of installation activity to date under GD, and limited expectations of future growth in demand, the relatively low proportion of planned 'exits' from the market may be due to the relatively low marginal cost of maintaining certification (compared to the cost of getting certified in the first instance).

What is the nature of the business models of different individuals and businesses within the GD supply chain? How are they approaching GD and/or ECO assessments and installations, interacting with consumers, and applying charges and fees?

7.6. Business models here are described in terms of the 'service offers' of GD suppliers, from the process of carrying out GD assessments, through to the measures installed and the finance used to fund these measures.

GD assessments

7.7. Amongst GD advisors, the median average duration of a GD assessment was 90 minutes, and three quarters took 120 minutes or less. Assessments carried out for ECO were typically shorter than assessments carried out under GD, with a median average of 60 minutes (a quarter took 45 minutes or less).

7.8. The majority of advisors charged customers for GD assessments. Where they did not, this was usually because another organisation was paying (e.g. an assessor, an energy company (which would probably be connected with ECO), and/or an installer). Very few advisors did not charge for what might be thought of as 'market' reasons (e.g. free assessments were conditional upon a customer taking out a GD Plan). Advisors on average charged customers £136 for a GD assessment, though there was considerable variation, with a quarter (23%) charging less than £100. Some 40% of advisors reported that the price they charged customers was the same regardless of whether a GD assessment was for GD or for ECO purposes.

7.9. Advisors reported that they typically provided advice and support as part of the GD assessment process, with most indicating that they offered general energy saving advice, advice on next steps, and/or help understanding the GDAR.

The range of measures offered by installers

7.10. Conventional heating measures (gas and/or oil boilers) were the measures that installers most commonly offered (71% of installers offered one or both types of boiler – mostly gas boilers). Half of installers (51%) offered renewable energy products, with solar technologies (PV and or solar thermal) the most common. Around a third (35%) of installers 'specialised' in the installation of a single measure (35%). Some 63% of installers offered multiple measures, and 47% offered multiple measures from multiple market 'segments' (i.e. more than one of: insulation, conventional heating or renewable energy products).

7.11. There is evidence that some installers had added measures to their 'portfolio' of measures since joining the GD supply chain, with 14% of installers indicating that their range of measures had increased as a result of GD and/or ECO. The addition of insulation measures was the most common occurrence, particularly loft insulation.

The provision of finance to fund installations

[39] This question was not asked of advisors or assessors, and so the future market intentions of these suppliers are not known

7.12. The quantitative survey asked advisors, assessors and installers whether they provided help to customers in relation to accessing the finance that was often needed to fund installations. There appears to have been some confusion amongst respondents about exactly what constituted 'help' (i.e. whether this consisted of general advice about options, or whether this meant brokering/ providing finance to customers), and so the results should be treated with some caution. Nevertheless, with these caveats in mind, between 17% and 25% of suppliers reported that they provided customers with help regarding finance, which suggests that this is not common practice. Survey respondents listed GD finance, ECO funding, and credit provided by GD providers as examples of the sources of finance that they offered to customers. Qualitative interviews highlighted that some suppliers offered finance credit sources, including credit that was used to 'top-up' shortfalls caused by GD finance not meeting the full installation costs.

What is the scale and nature of the relationships between advisors, assessors and installers? How do they interact with GD providers and other suppliers?

7.13. Most advisors, assessors and installers worked with, or expected to work with, other businesses and organisations in the delivery of GD and/or ECO (just 17% of advisors and 19% of assessors reported that they worked entirely independently, and 24% of installers).

7.14. Advisors and assessors often undertake GD assessments on behalf of other organisations, particularly other GD suppliers (GD providers, installers and/or other advisors/ assessors). For example, 41% of advisors and 43% of assessors reported that they had carried out GD assessments for GD providers. Advisors and assessors also often recommended a GD provider and/or GD installer to a customer having completed a GD assessment (39% and 45% of advisors/ assessors reported that they made such recommendations). Advisors and assessors also reported that they carried out GD assessments on behalf of a wide range of other organisations, including letting agents/ landlords, local authorities, housing associations, and energy companies.

7.15. Installers carried out GD/ ECO installations for a range of other organisations, including GD providers (around a half of installers had done so), as well as letting agents/ landlords. SWI installers were particularly likely to work on behalf of other organisations, including local authorities, housing associations, and energy companies.

What are the views of installers on becoming GD providers?

7.16. Of the installers that were not registered as GD providers at the point at which the survey was conducted, around a third had at some point considered becoming GD providers. Certain types of installer were more likely to have considered the GD provider role, in particular businesses that already helped arrange finance for customers, and/or businesses that had delivered large numbers of installations under GD/ ECO. Arguably, installers that already resembled GD providers were thus more likely to have considered the role, together with installers that were highly active/ dependent on GD/ ECO.

7.17. Key factors that were reported to have deterred those installers that had not applied to become a GD provider from doing so included the complexity of providing finance, and the complexity/ cost of registering as a GD provider. It should be noted, however, that around 50 businesses were already registered as both GD providers and installers, and so clearly many businesses are willing/ able to overcome these 'barriers'.

What are the views of GD suppliers on the GD certification processes, on GD standards, and on GD tools?

7.18. Views amongst advisors, assessors and installers about the GD certification process were mixed. Around 40% of each type of supplier rated their experience as 'good'/ 'very good', and a similar proportion rated it as 'poor'/ 'very poor'. Opinions did not vary significantly depending on when a supplier was authorised or how large they were. Qualitative research with a small sample of suppliers found that there was some dissatisfaction with the complexity and time required to become GD certified (which for some duplicated existing certification schemes); the costs of certification (especially when set against lower than expected income levels); and a perceived lack of uniformity of certification (resulting in variable quality amongst certified GD suppliers).

7.19. Survey responses suggest that, whilst for advisors the certification process could often be relatively quick (often under one month in duration), for assessors and installers it was often the case that certification took more than two months (note that this was from a sample of suppliers that had been through authorisation prior to November 2013). There was some evidence of a lack of information provided to suppliers about the expectations under GD, with around a third of advisors, assessors and installers reporting that their certification body had not provided them with enough information. Views were also somewhat mixed on the performance of GD ORB as part of the registration process, particularly in relation to how well GD ORB had dealt with queries from suppliers.

7.20. 'Standards' that underpin GD include the GD Quality Mark, PAS2030 (for installers), the assessor Specification, and the National Occupational Standards for advisors. Views on the GD Quality Mark were somewhat mixed, though a majority (between 50% and 60%) of advisors, assessors and installers agreed that the Quality Mark improved their reputation and/or offered reassurances to customers. There was less support amongst GD suppliers for the idea that the Quality Mark helped them secure work outside of GD. The qualitative interviews included suppliers that believed there should be enhanced enforcement in relation to usage of the Quality Mark, since there were reported to be examples of businesses claiming to be certified under the Mark when they were not.

7.21. The other standards (PAS2030 etc.) were generally well-regarded by GD suppliers. PAS2030 was seen by the majority of installers to have improved upon previous practice, and some 61% of installers believed that it would become the benchmark across the installation market.

7.22. Advisors and assessors were for the most part positive about the various 'tools' that they used as part of the GD assessment process (i.e. RdSAP, the OA tool, and the GDIP tool). The majority of advisors rated RdSAP and the OA tool as fit for purpose, as did assessors (albeit a slightly lower majority). GDIP was rated as fit for purpose by a slightly lower proportion of advisors and assessors, though the high number of both groups that selected 'don't know'/ 'refused' suggests that familiarity with the GDIP tool was lower.

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