

MCS Renewable Heat Technology Installers Survey

A research project commissioned as part of the Evaluation of the Renewable Heat Incentive

January 2016

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INTRODUCTION TO THE EVALUATION AND THIS RESEARCH PROJECT

The **evaluation** of the **Renewable Heat Incentive (RHI)** was commissioned by the Department of Energy and Climate Change (DECC). The aim of the evaluation overall is to understand the administration, delivery and performance of the RHI and explore its effects on the customers and the supply chain. All reports can be found here:

<https://www.gov.uk/government/collections/renewable-heat-incentive-evaluation>

The survey of MCS installers of renewable heat technologies was conducted by NatCen Social Research and Eunomia Research & Consulting Ltd.

Research Aims

The questionnaire focussed on the following themes:

- Opinions of the heating market and their interactions with customers;
- Understanding of the influence of the RHI on the installer market; and
- Understanding the impact of the MCS scheme.

The survey aimed to elicit the views of renewable heat installers registered with the Microgeneration Certification Scheme (MCS), which holds information on a wide range of installers that serve the domestic and non-domestic markets.



The survey was conducted between December 2014 and February 2015 on installers serving both the domestic and the non-domestic markets.

The survey was carried out by web and telephone. **327** responses were received, with applicants answering between 27 and 71 questions, depending on their and their installation's characteristics. The survey had a response rate of **21%**.

Whilst some questions specifically drew a distinction between the **domestic** and **non-domestic markets**, others simply gathered information from the **sample population as a whole**. However, even in the case of the latter, it is possible to compare the responses of installers that serve the **domestic market only** to those that serve the **domestic and non-domestic markets**. Therefore, depending on the question, when sectoral information is presented one of these approaches is used.

More information on the methodology is available in [Slide 12](#) and in the accompanying technical annex¹. An index listing the questions featured in the figures is available in [Slide 13](#).

The Microgeneration Certification Scheme (MCS)

The MCS is a quality assurance scheme that certifies microgeneration technology used to produce electricity and heat from renewable sources. Installer certification includes an assessment of the supply, design, installation, set-to-work and commissioning of renewable microgeneration technologies. It is also an eligibility requirement for the domestic RHI: applicable technologies must be less than or equal to 45kWth in size for a single technology installation and have MCS certification.

¹ <https://www.gov.uk/government/collections/renewable-heat-incentive-evaluation>

KEY FINDINGS

Who were the MCS renewable heat technology installers? (slide 5)

Renewable heat technology installers registered under the MCS included organisations that operated across both the domestic and non-domestic markets, with 78% having installed renewable heat technologies for over three years.

Installers **offered a wide range of renewable heat technologies** (76% of MCS installers offered two or more technology types), as well as **conventional fossil fuel-based heat systems** (44% of MCS installers reported to install non-renewable heat technologies).

How did they perceive the state of the market? (slides 6 & 7)

Over 60% of installers (61% in the domestic market and 65% in the non-domestic market) perceived that **demand for renewable heat technologies had increased since 2013**, with organisations that installed biomass boilers being the most likely to have experienced this increase. The most common way in which installers responded to the increase was to 'work harder' (reported by 39% of installers that served both the domestic and the non-domestic markets).

Around three quarters (76%) of installers felt that **the renewable heat technology market was competitive**. While increased competition has resulted in some installers expanding their services beyond renewable heat, there was also a perception among installers that competition was resulting in installers sometimes providing a worse service (43%). This was much higher amongst installers that installed across both markets (52%) compared to those that only served the domestic market (21%).

What did they think of the MCS? (slides 8 & 9)

Although over half (55%) of installers believed that the quality of installations had improved under the MCS. Around two thirds (67%) felt that the costs and effort of being MCS accredited were '*not proportional to the volume of installations that it brought to their organisation*'.

How did MCS renewable heat installers rate their training and skills? (slide 8)

The overwhelming majority (81%) of installers were **confident in the training they had received on installing renewable heat technologies**. Despite high levels of confidence in their own training, around two-thirds (68%) of installers believed that general skill levels within the renewable heat technology market were '*satisfactory*' or '*poor*'.

What were customers' motivations and barriers to installing a renewable heating technology? (slides 9 & 10)

Installers said clients were most likely to hear about their services through **recommendations from previous customers** (42% in domestic market and 37% in non-domestic market). **Financial considerations** were perceived to be the biggest driver behind the take up of renewable technologies in both markets (80% in domestic market and 75% in non-domestic market), while environmental considerations were secondary (7% in domestic market and 5% in non-domestic market).

The majority of installers (86% in the domestic market and 74% in the non-domestic market) believed that **finance was also the key barrier preventing potential customers from choosing renewables**. Specifically, upfront costs (80% in domestic market and 63% in non-domestic market) and lack of access to suitable finance (28% across both markets) were identified as the most important obstacles to the greater roll out of renewable heat systems.

What has the influence of the RHI been? (slide 11)

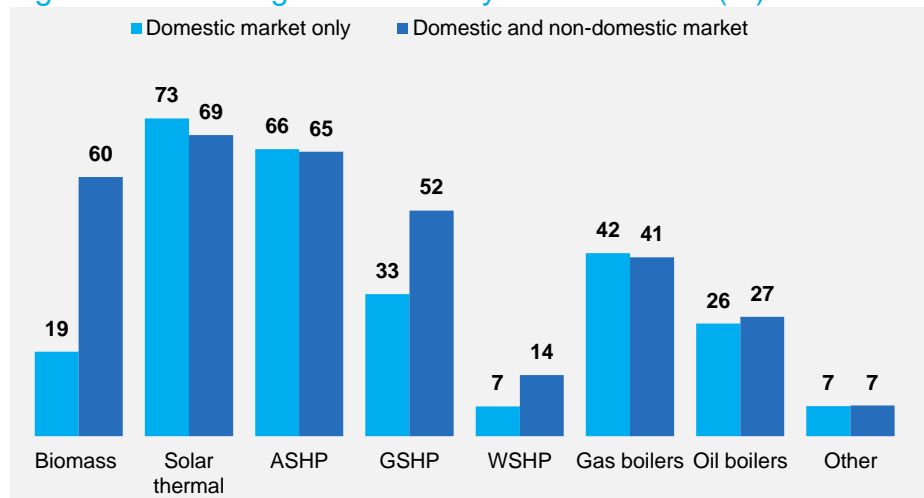
Nearly three in five installers (58%) felt that the **RHI had been wholly positive in its influence on the renewable heat technology market**, with 34% believing that the influence of the RHI was both positive and negative and 8% reporting that the scheme had been wholly negative. **Increases in enquiries** (56% in domestic market only and 80% in domestic and non-domestic market) was the most commonly cited benefit, while the **uncertainty of the degeneration mechanism** was considered to be a key limitation of the scheme by 24% of MCS installers.

MCS INSTALLERS OF RENEWABLE HEAT

71% of MCS renewable heat installers reported to have served both the domestic and non-domestic markets, whilst 29% of certified installers served the domestic market only.

Installers were asked what technologies they had installed during the company's lifetime. Solar thermal was the most popular technology offered by installers (73% for installers serving the domestic market and 69% for those serving both markets).

Figure 1: Technologies installed by market served (%)

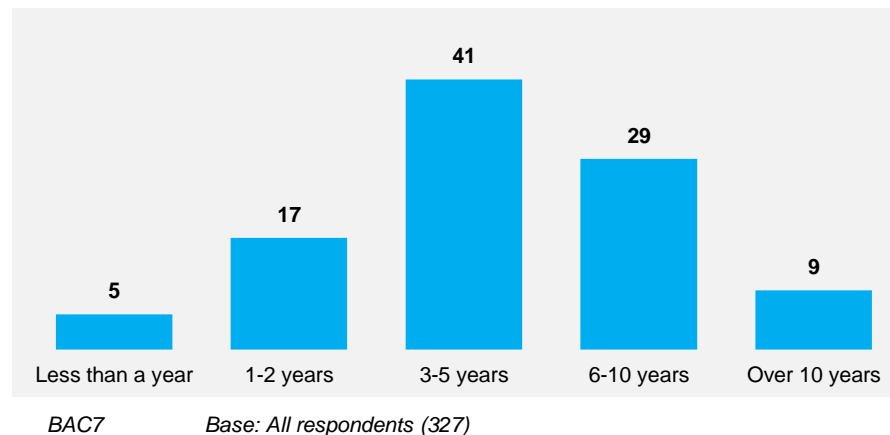


BAC1 by market served Base: All respondents (327)
*Respondents were able to select multiple answers to this question

Installers that operated in the domestic market only were less likely to install biomass boilers (19%) compared to installers that operated in both the domestic and non-domestic markets (60%).

The majority of installer organisations had been active for three to five years, with 78% of organisations having installed renewable heat technologies for over three years.

Figure 2: Length of time as an installer (%)



Technologies installed

76% of MCS renewable heat installers offered two or more technology types, with 58% offering three or more. In addition, 44% of MCS installers installed non-renewable heat technologies alongside renewable heat technologies. This suggests that customers are likely to be offered a range of technologies when engaging with a MCS installer.

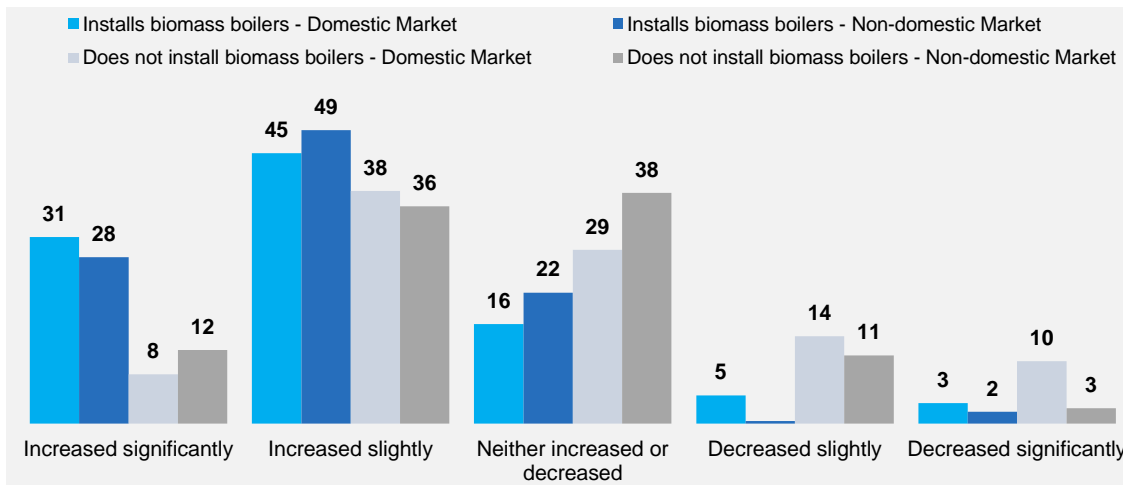
THE RENEWABLE HEATING MARKET: CHANGES IN DEMAND

61% of organisations that served the domestic sector and 65% of those that served the non-domestic sector felt that **demand in the renewable heat market had increased since 2013**.¹

Organisations that installed biomass boilers were the most likely to report an increase in demand (31% in the domestic sector and 28% in the non-domestic sector reported that it had '*significantly increased*') compared to those that did not (8% and 12% respectively). This is not surprising considering the large number of biomass boilers installed since the advent of the RHI relative to other technologies (especially in the non-domestic sector).

Installers responded to the change in demand for renewable heating technologies by '*working harder*' (both markets - 39%) and by '*absorbing the workload with existing spare capacity*' (domestic market - 27%, non-domestic market - 32%). They were less likely to '*employ more people*'.

Figure 3: Change in demand since 2013 (%)



MS1 and MS8

Base: MS1 (316), MS8 (225)

Table 1: Top responses to changes in demand since 2013

Response	Domestic (%)	Non-Domestic (%)
Worked harder	39	39
Absorbed the workload	27	32
Trained more people	26	30
Installed new technologies	26	16
Employed more people	22	24

MS2 and MS9

Base: MS2 (316), MS9 (225)

*Respondents were able to select multiple answers to this question

Looking to the future

Changes in future demand

When asked how they envisaged demand for renewable heating technologies changing over the next 2 years in the domestic sector, most installers expected demand for biomass (76%), ASHPs (71%) and GSHPs (64%) to increase. Just 25% of organisations felt the same way about solar thermal.

Responses to future demand

Over four in ten (41%) installers in the domestic sector said that they would 'employ more people' in response to an increase in demand in the next 2 years (a much higher response compared to when installers were asked about how they responded to changes in demand since 2013). 32% of installers in the non-domestic sector gave the same response.

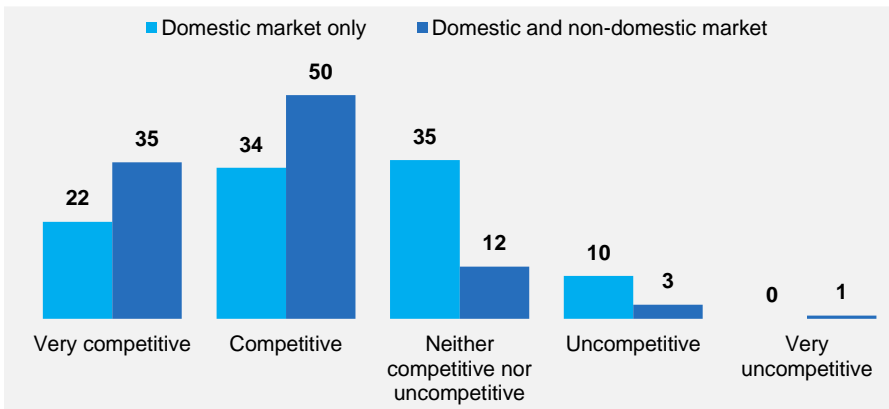
¹ See [Slide 12](#)

THE RENEWABLE HEATING MARKET: COMPETITION

76% of installers felt that the renewable heat technology installer market was competitive.

Organisations that served both the domestic and non-domestic markets were more likely to perceive the market to be 'very competitive' (35%) than those that served the domestic market only (22%).

Figure 4: Perceived competitiveness of the installer market (%)



MS44 by market served Base: 317

Competition in the non-domestic sector may be perceived to be greater than in the domestic sector because the RHI has been available in the former for longer. Indeed, respondents most commonly attributed increased competition in the market to an increase in the number of installers and the availability of the RHI. In addition to this, these installers may have experienced more competition as they served two different markets.

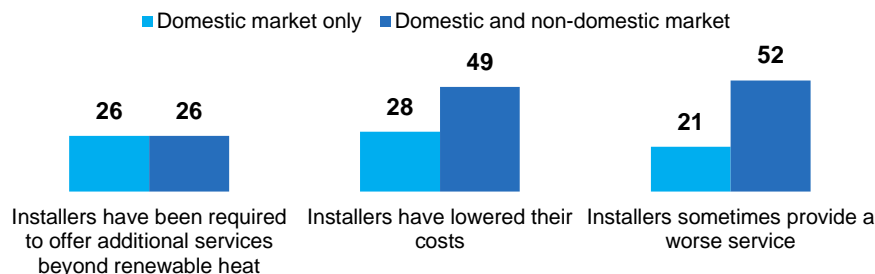
Furthermore, organisations that installed biomass boilers were more likely to perceive the market to be competitive (87%) compared to those that did not install biomass boilers (66%).

Installers' responses to competitiveness varied according to the markets they serve.

Organisations that served both markets (52%) were more likely to perceive 'that installers are providing a worse service' as a consequence of this competition compared to those that served the domestic market only (21%). The quality of installations is also discussed in [Slide 11](#).

Older installers (those that had served the market for over 3 years; 49%) were also more likely to hold this view compared to newer ones (served the market for 0-3 years; 24%).

Figure 5: Impact of perceived competition in the installer market (%)



MS45 by market served Base: 317

Change in installers' costs?

Many organisations felt that installers 'lowered their costs' as a consequence of the competition (28% in the domestic market and 49% in both markets). However, in response to a separate question on the general costs of installation, organisations did not report significant changes.

Where the cost of installations increased, these were most frequently associated with the increasing 'costs of equipment' (15% in the domestic market and 21% for the non-domestic market).

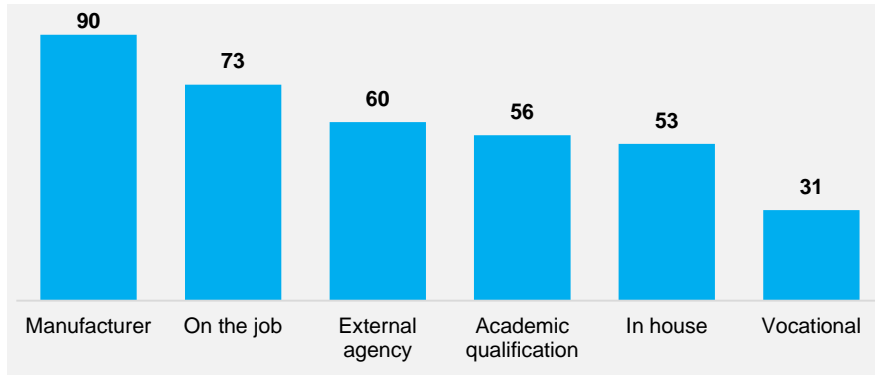
TRAINING AND SKILLS IN THE INSTALLER MARKET

The results paint a picture of a confident installer market, with 81% of installers either **'very confident'** or **'confident'** with the training they have received in respect to installing renewable heating technologies. Only 2% were **'not confident'**.

The vast majority of installers received training from **'manufacturers'** (90%) or **'on the job'** (73%), with a smaller proportion receiving **'formal qualifications'** (56%), or **'vocational training'** (31%).

When asked about the availability of training, the majority of installers felt that it was either **'good'** (30-39%) or **'satisfactory'** (37-39%). However, a sizeable proportion of respondents also perceived the availability of training to be **'poor'** (19-29%). There was very little differentiation between people installing different technology types.

Figure 6: Type of training received (%)

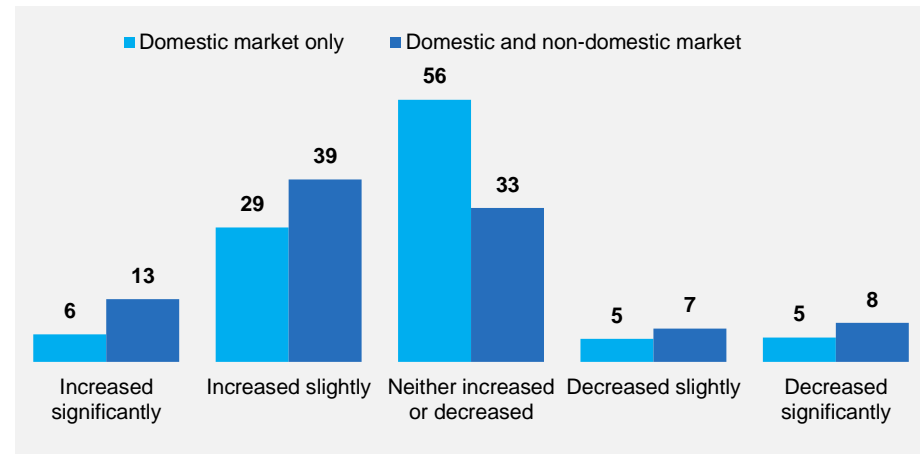


BAC17 Base: all respondents (327)
*Respondents were able to select multiple answers to this question

Despite feeling confident in their training, 34% of installers felt that the general level of skills within the renewable heat market was **'satisfactory'** and 33% felt that it was **'poor'**.

Newer installers (those that had been installing renewable heating technologies for less than 3 years) were more likely to perceive the general level of skills to be **'good'** or **'excellent'** (52%), compared to those that had been installing for 6-10 years (20%).

Figure 7: Perceived changes in skills since start of RHI (%)



RHI3 by market served Base: 300

Quality of Installations and the MCS

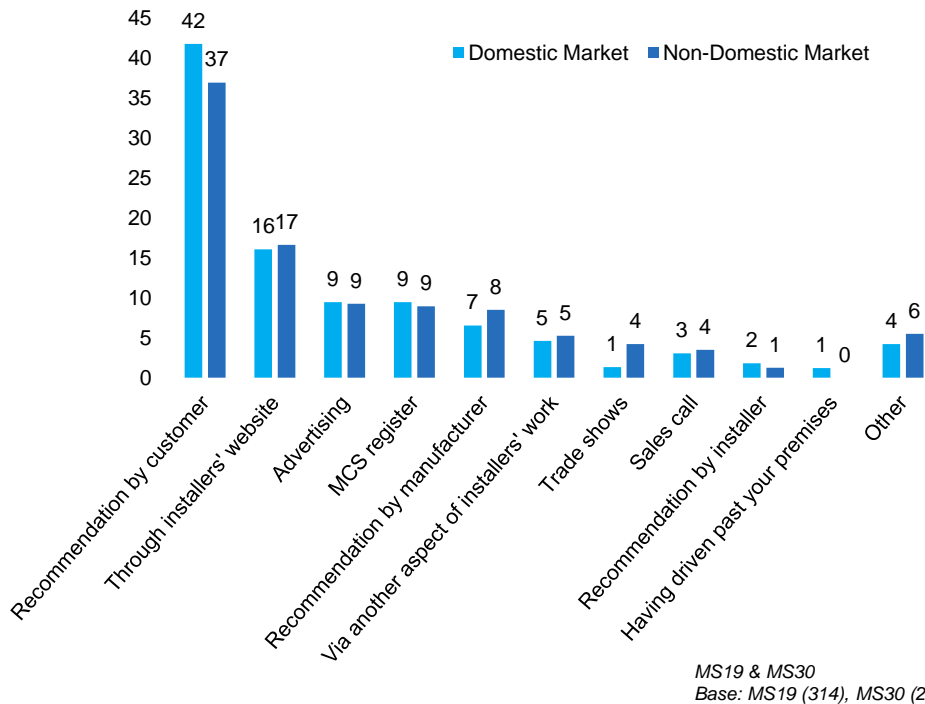
55% of installers perceived the quality of installations to have improved as a result of the MCS, whilst just 6% felt that it had deteriorated. 39% felt that it has neither improved nor deteriorated.

PERCEPTIONS OF MOTIVATIONS TO INSTALLING RENEWABLE HEATING TECHNOLOGIES

Installers felt that customers were most likely to hear about them through a ‘*recommendation by another customer*’ (42% of domestic market installers and 37% of non-domestic market installers).

There was very little difference between the domestic and the non-domestic market, with both types of installers perceiving their customers to have a similar route to their market.

Figure 8: Customer route to installers (%)



Installers held a strong perception that customers were motivated by financial reasons, including the RHI tariff payments (80% of domestic market installers and 75% of non-domestic market installers).

Domestic and non-domestic installers perceived that motivations for installing renewable heating technologies were broadly similar. Installers of biomass boilers were the most likely to report that customers were motivated by financial reasons (including the RHI). This result was starkest for the non-domestic market, where 87% of biomass boiler installers reported financial reasons as the most common motivation compared to 59% of those that installed other technologies.

Table 2: Perceived Motivations of Customers

Response	Domestic (%)	Non-Domestic (%)
Financial impact of the technologies, inc. RHI	80	75
Financial impact of the technologies, exc. RHI	8	8
Environmental motivations	7	5
Legislative requirements	2	5

MS18 & MS29 Base: MS18 (316), MS29 (242)
Excluding 'technical suitability of the technologies'.

Cost and effort of MCS accreditation

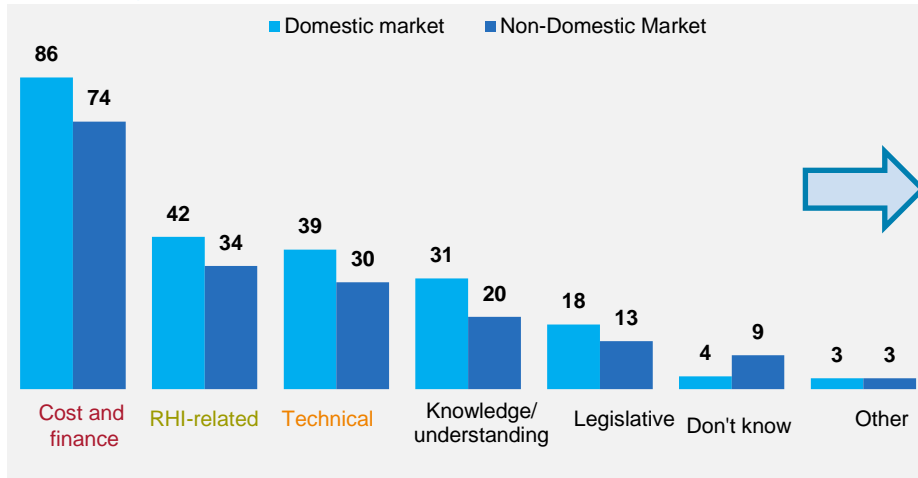
67% of installers felt that the costs and effort of being MCS accredited were '*not proportional to the volume of installations that it brought to their organisation*'. This is consistent with the perception that very few customers find their installer through the MCS register (see Figure 8) with recommendations by other customers being a much more likely route.

PERCEPTIONS OF BARRIERS TO INSTALLING RENEWABLE HEATING TECHNOLOGIES

The majority of organisations in the domestic (61%) and non-domestic (63%) markets reported that either **'some' or 'a lot' of potential customers did not go on to install a renewable heating technology after enquiring.**

Over three quarters of installers felt that financial considerations were a key barrier to installing a renewable heating technology in the domestic and non-domestic markets (86% and 74% respectively). Installers were then asked about specific barriers that impact potential customers. Respondents perceived that the most common barrier under the 'financial' category was **'upfront costs'** (interesting given the finding that **upfront costs** were the most likely aspect of installation perceived to have to increased). Other financial barriers, including **'access to suitable finance'**, were perceived by installers as important barriers to installing renewable heating technologies.

Figure 9: Main barriers to installing renewable heating technologies (%)



MS23 & MS34 Base: MS23 (320), MS34 (242)

*Respondents were able to select multiple answers to this question

Important barriers to installing renewable heating technologies¹

Respondents believed their customers faced particular barriers to choosing renewable heat systems depending on the technology they installed:

- Installers of biomass boilers in the domestic market (31%) were more likely to cite **'space requirements'** as a barrier than non-biomass installers (15%).
- GSHP (32%) and ASHP (28%) installers in the domestic market were more likely to perceive that **'alternative heat systems were more technically suitable for their customers'** than non-heat pump installers (16% and 14% respectively).

Table 3: Main barriers to installing renewable heating

Rank	Domestic Market	Non-domestic Market
1	Upfront costs of renewable heating technologies (80%)	Upfront costs of renewable heating technologies (63%)
2	Unable to access suitable finance (28%)	Unable to access suitable finance (28%)
3	Uncertainties associated with RHI payments (25%)	Lower tariff payments for some technologies than others (25%)
4	Alternatives are technically more suitable (24%)	Uncertainties associated with RHI payments (23%)
5	Space requirements are too large (22%)	Overall costs of renewable heating technologies are too expensive (20%)

Combination of MS24-28 and MS35-39

*Respondents were able to select multiple answers to this question

¹ Colour-coded according to type of main barrier identified in Figure 9. Percentages are representative of the total population.

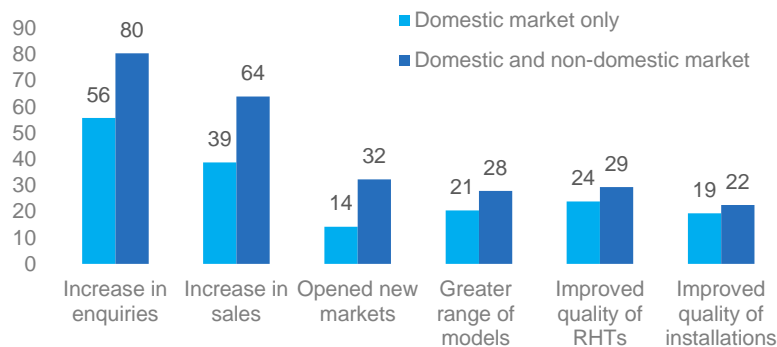
INFLUENCE OF THE RHI

58% of installers felt that the influence of the RHI has had a **'positive' impact**, with just 8% believing it to have had a **'negative' impact**. 34% of installers believed that it had both a **'positive and a negative' influence**.

Whilst there was little distinction between those that operated in the domestic market and those that operated across both markets, installers that had been installing renewable heating technologies for longer were less likely to view the RHI as having a wholly positive impact, in particular those that had been installing for over 6-10 years (51%). This compares with 73% for organisations that had been installing for under 3 years.

Organisations that installed biomass technologies were the most likely to cite positive impacts associated with the RHI, including an *'increase in enquires'* (85% compared to 62% for installers that did not install biomass), an *'increase in sales'* (71% compared to 43%) and a *'greater range of models available'* (34% compared to 18%).

Figure 11: Perceptions of the Positive Influence of the RHI by Market (%)



RHI8 by market served Base: all respondents (314)

*Respondents were able to select multiple answers to this question

...and what were the negative impacts?

Negative impacts were reported by a lower proportion of respondents. However, the most frequently cited negative impacts of the RHI included:

1. Uncertainty due to the nature of the degression mechanism (24%)
2. An increase in the number of lower quality technologies on the market (22%)
3. A decrease in the market share of some technologies due to lower tariff payments (22%)

It was not possible to analyse these responses further due to the low number of installers that reported negative impacts.

How many installed units can be attributed to the RHI?

42% of installers in the non-domestic market felt that **'none'** of their installations would have gone ahead without the RHI. This figure compares to 23% for the domestic market. This reflects installers perceptions that the RHI has led to an increase in enquires and sales.

Why was the MCS Database chosen as the sample frame?

The MCS installer population was drawn upon because it holds information on a wide range of installers. The vast majority of renewable heating systems in the domestic RHI must be certified by MCS and their installers registered on the scheme. In addition, for the non-domestic RHI scheme, installations with a capacity of 45kWth or below are typically required to have an MCS or equivalent certification. This means that this data is more reflexive of those organisations installing under the domestic RHI scheme.

Distinguishing between domestic and non-domestic installers

As noted in [Slide 4](#), respondents to the survey were asked some specific questions in reference to the domestic and non-domestic markets, depending on whether they offered services in either. Some respondents, who offered both services, provided similar responses to both domestic and non-domestic market questions.

It is not possible to tell whether respondents who operated in both markets actually viewed the two markets as being similar, or misunderstood the question being asked. Thus some caution should be taken when analysing differences between domestic and non-domestic markets results presented in this document.

Non-response

Some participants chose not to answer every research question. No systematic bias was found in these cases.

Use of 2013 as a reference year

Some of the questions within the survey used a reference year. For example, “how has the overall demand for renewable heat technologies in the domestic sector changed since the start of 2013?” This specific year was chosen throughout the survey partly because it was not long before the advent of the domestic RHI scheme and it was thought that installers would be beginning to pay closer attention to this market. Although it would have been insightful to have data on installers’ opinions from even earlier, perhaps prior to the start of the non-domestic scheme in 2011, it seemed less likely that respondents would be able to accurately recall such information.

Weighting technique

The results of the survey were weighted to reflect the population. A calibration weighting procedure was used make sure that the weighted sample distribution matched the population totals on key variables. See further details in the [technical annex](#)¹.

Reporting Difference

Unless otherwise stated, all differences reported have been tested at a significance level of 0.05, indicating a 5% risk of concluding that difference exists where there is no actual difference.

¹ <https://www.gov.uk/government/collections/renewable-heat-incentive-evaluation>

QUESTION INDEX

Question type	Question reference	Question
Background	BAC1	Which of the following technologies has your organisation installed?
	BAC7	How long has your organisation been installing renewable heat technologies?
	BAC17	What training have you completed on installing renewable heat technologies?
RHI	RHI3	How do you feel the general level of skills in the renewable heat market has changed since the start of the RHI?
	RHI8	What types of positive impacts have been observed?
Market Situation	MS1	How has the overall demand for renewable heat technologies in the domestic sector changed since the start of 2013?
	MS2	How has your organisation responded to this change in demand?
	MS8	How has the overall demand for renewable heat technologies in the non-domestic sector changed since the start of 2013?
	MS9	How has your organisation responded to this change in demand?
	MS18	Which would you say is the most common motivation behind domestic customers' demand for renewable heat technologies?
	MS19	How do most potential domestic customers hear about the renewable heat services that you offer?
	MS23	In your opinion, what are the issues that prevent these potential domestic customers from installing renewable heating technologies?
	MS24-29	Specific barriers to installation (domestic sector)
	MS29	Which would you say is the most common motivation behind non-domestic customers' demand for renewable heat technologies?
	MS30	How do most potential non-domestic customers hear about the renewable heat services that you offer?
	MS34	In your opinion, what is it that prevents these potential non-domestic customers from installing renewable heating technologies?
	MS35-39	Specific barriers to installation (non-domestic sector)
	MS44	To what extent do you feel the renewable heat technology installer market is competitive?
MS45	What is the impact of this competition?	

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