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Energy Company Obligation (ECO)

ECO2 monitoring report

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Issue **5**

Introduction

This report presents the results of independent monitoring of ECO2 measures. Suppliers conduct three types of monitoring: Technical Monitoring, Score Monitoring and Best Practice Monitoring. Technical Monitoring and Score Monitoring are requirements in our ECO guidance, whereas Best Practice Monitoring is optional.

We publish this report as part of our commitment to transparency and to provide information that will help drive improvements in quality in the energy efficiency industry. The report covers ECO measures that fall within the scope of the monitoring requirement for Quarter 5 of ECO2 (April 2016 – June 2016).

Summary

The Technical Monitoring rate was similar to that of Quarters 3 and 4, whereas the Score Monitoring rate was slightly lower, though at 7% still well above the 5% requirement. Taking into account 'overturned' inspections, the failure rate for Technical Monitoring was the same as for Quarter 4. For Score Monitoring, however, the failure rate was the highest recorded so far. For both types of monitoring, however, reported failure rates were on average well below the trigger rates of 10% and 20% respectively.

Similar to the report for Quarter 4, this report also includes information on the number of measures and installers that were placed on a Pathway to Compliance. This information was not included for Quarter 1 because no measures were placed on a Pathway for that quarter. We will continue to include this information in future reports. Compared to Quarter 4, the percentage of installers placed on a Pathway has remained relatively stable, but the number of measures has increased for both Technical and Score Monitoring. This suggests that compared to Quarter 4, installers placed on a Pathway in Quarter 5 delivered on average more measures.

The numbers in this report were last updated on 24 January 2017.

Technical Monitoring

This part of the report covers the results of Technical Monitoring conducted for ECO2 Quarter 5 (April 2016 – June 2016).

Technical Monitoring is a compliance regime under ECO that requires obligated suppliers to commission on-site inspections of at least 5% of measures installed in a quarter, conducted by an independent party. This is to ensure that measures delivered under ECO are installed to the appropriate standards and are capable of generating the claimed carbon or cost savings. Suppliers must resolve issues with measures that fail a Technical Monitoring inspection and may lose the savings associated with the measure if they do not do so.

Suppliers must also monitor at least 3% of measures installed by a particular installer[1]. If the failure rate for an installer is greater than 10%, we consider the installer to be 'at risk' and they will be placed on a Pathway to Compliance. As part of this Pathway, we may ask the supplier to provide us with additional monitoring or assurances for this installer.

More information on the Pathways to Compliance is available on our website.

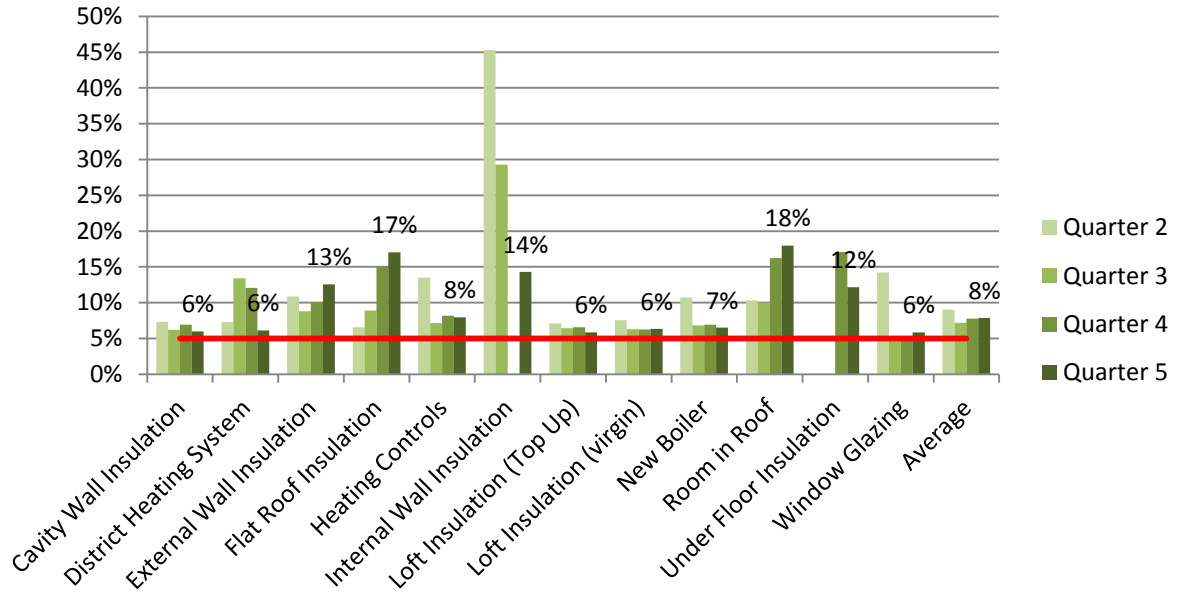
[1] The requirement for installers who deliver fewer than 100 measures in a quarter is for one measure to be monitored.

Monitoring rates

Technical monitoring was carried out on 9,508 measures, amounting to 7.8% of all measures that fall within the technical monitoring requirement for the quarter (120,971)[2]. The graphs below show the monitoring rates for all notified measures in Quarter 5, by measure type (Fig. 1) and obligated supplier (Fig. 2). The average monitoring rate is indicated in the rightmost columns. The red line indicates the required level of Technical Monitoring (5%). Percentages in the graphs are only shown for the most recent quarter. The previous three quarters have been included for comparison. Information on earlier quarters can be found in previous reports.

Note that Figures 1 and 3 only include those measure types for which more than 100 measures fell within the monitoring requirement for this quarter. As can be seen in Figure 2, all suppliers met the monitoring requirement for Quarter 5.[3]

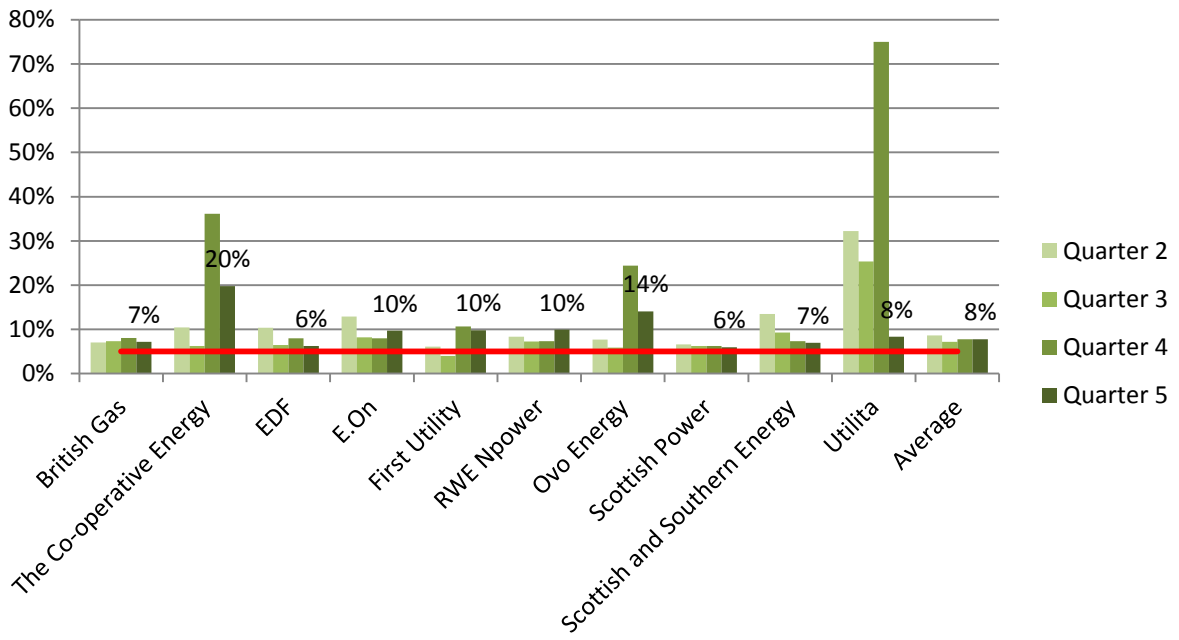
Fig. 1) Technical monitoring rates as a percentage of all notified measures by measure type



[2] For the definition of the monitoring requirement, please see our ECO2 Guidance: Delivery, sections 9.6 to 9.14.

[3] There is no data included for Utility Warehouse, as this supplier delivers its obligation through transfers from another supplier, which is responsible for meeting the monitoring requirements.

Fig. 2) Technical monitoring rates as a percentage of all measures notified per supplier



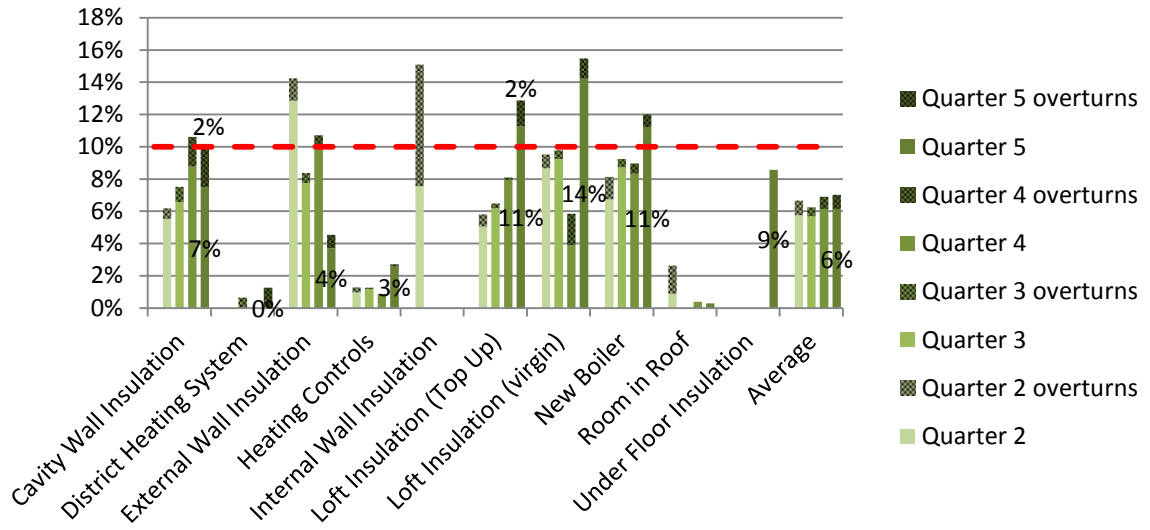
Failure rates

668 of the 9,508 measures monitored did not meet the required standards of installation (~7%). The graph below shows the installation failure rates for all monitored measures in Quarter 5 by measure category. The average failure rate for all measure categories/suppliers is provided in the rightmost columns, while the red line indicates the Technical Monitoring failure threshold (10%). Percentages in the graphs are only shown for the most recent quarter. The previous three quarters have been included for comparison. Information on earlier quarters can be found in previous reports.

In some cases, a Technical Monitoring Agent may decide that their initial assessment was incorrect and that a measure that failed an inspection had actually passed. We refer to these inspections as 'overturns'. Suppliers report overturns to us on a monthly basis. We then adjust the previously reported failure rates to take any overturns into account. If the adjusted failure rate drops below the 10% threshold for an installer, we will take that installer off the Pathways to Compliance.

In the figure below, the number of overturned measures is represented by the dotted area at the top of the columns. The most commonly failed questions relating to these measures are provided in the commonly failed questions section below.

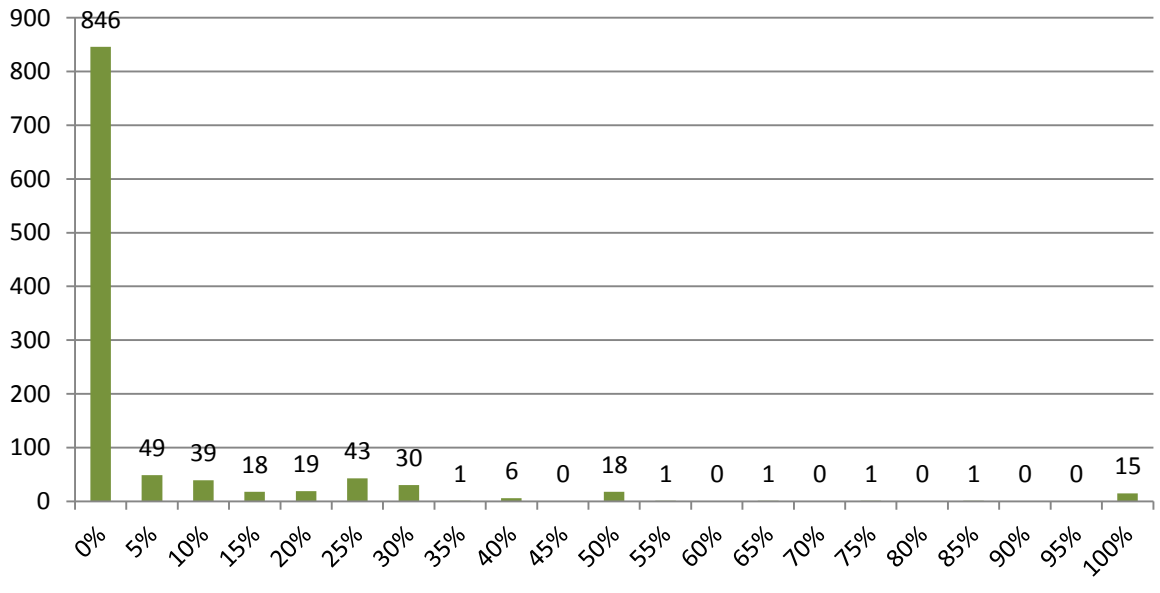
Fig. 3) Technical monitoring failure rates as a percentage of all measures monitored per measure type



Industry Performance

The graph below shows the distribution of installer performance. It shows the number of installers within a particular failure rate interval. Intervals have been set at 5% increments. Because installers are assessed in relation to a specific supplier, any installer who delivers to more than one supplier is counted multiple times.

Fig. 4) Distribution of installer failure rates



Pathways to Compliance

As part of ECO2, we have introduced the 'Pathways to Compliance' to address poor performance in a more targeted and effective manner. Across all suppliers, the total number of installers that were placed on a Pathway to Compliance under Technical Monitoring in Quarter 5 was 105. This corresponds to 9% of

all 1187 installers included in this monitoring period. As in Figure 4, installers are counted separately for each supplier. Installers who are placed on a pathway for more than one supplier are therefore counted multiple times. The total number of measures placed on the Pathway for Quarter 5 is 18,549, amounting to 15% of all measures that fell within the Technical Monitoring requirement for the quarter. This is a slight uptake compared to the number and share of measures placed on a pathway to compliance for Quarter 4.

We ask suppliers to conduct additional monitoring, or provide us with additional assurances, for their installers who are placed on a Pathway. When we have received sufficient assurances about the quality of the measures delivered by a particular installer, this installer will be taken off the pathways for this supplier. Figures 5 and 6 show the progress suppliers have made in providing us with such assurances for both the current and previous quarters. The first figure shows the number of installers that were originally placed on a Pathway to Compliance and the number that have since been moved off that Pathway. The second figure displays the number of measures originally placed on a Pathway and the number that have since been moved off it. Figures 5 and 6 also respectively show the percentage of installers and measures placed on a pathway as a percentage of all installers included and all measures notified within the monitoring period.

As Figure 5 shows, while the number of installers placed on a Pathway in Quarter 5 was higher than in Quarter 4, in percentage terms Quarter 5 actually saw better performance. This continues the trend starting in Quarter 4 of a significant drop in the share of installers placed on a Pathway. Figure 5 also shows that the majority of installers that were placed on a Pathway in Quarters 2 and 3 have now moved off after completing the additional monitoring or assurances required. No installers were placed on a Pathway for Quarter 1.

Fig. 5) Number of installers on a Pathway to Compliance by quarter

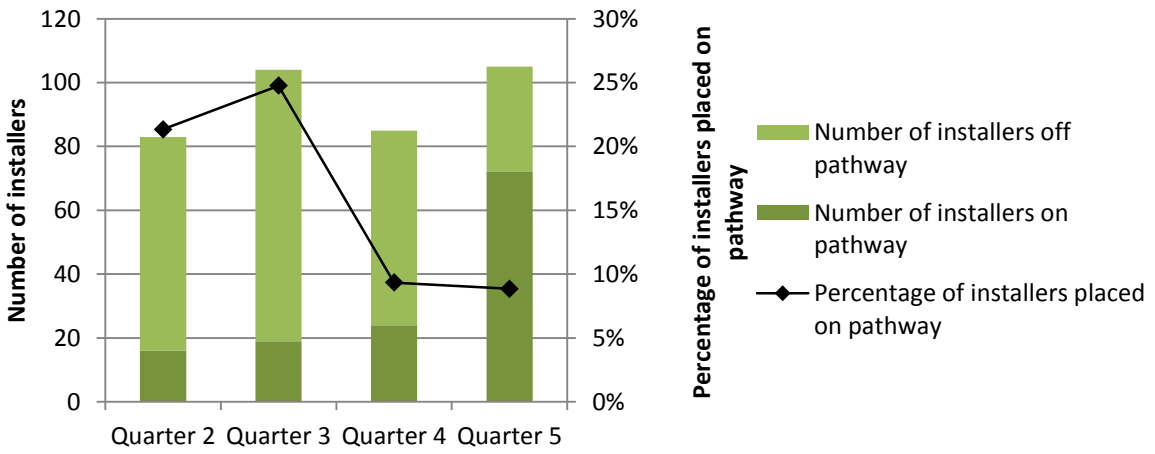
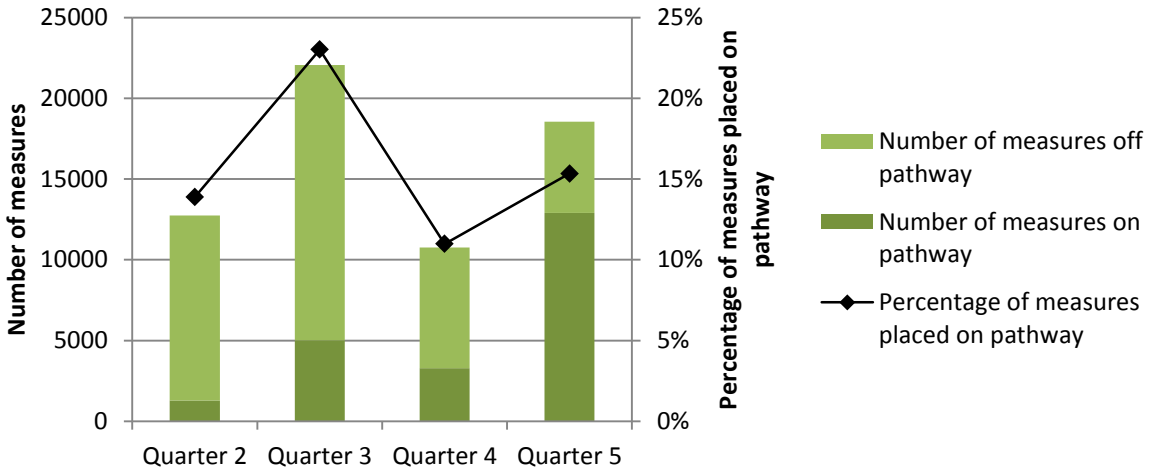


Figure 6 shows that as a percentage of all measures, the share of measures placed on a Pathway in Quarter 5 has gone up. As the share of installers placed on a Pathway has gone down slightly, this suggests that in Quarter 5 more large installers will have been placed on a Pathway, thereby causing the number of measures to go up. Similar to Figure 5, Figure 6 shows that the vast majority of measures placed on a Pathway for Quarter 2 or Quarter 3 have now been taken off the Pathways as the required actions have been completed.

Fig. 6) Number of measures on a Pathway to Compliance by quarter



Commonly failed questions

The tables below list the most commonly failed questions for each measure type. Only questions that have a failure rate of 3% or higher have been included. Suppliers must resolve issues with measures that fail a Technical Monitoring inspection and may lose the savings associated with the measure if they do not do so.

New Boiler		
Question No.	Question	Fail Rate
NB.1	Where a boiler and hot water storage vessel have been repaired or replaced, have any associated replacement pipes or pipes that have been exposed as part of the works or are now otherwise accessible been insulated where possible?	6.4%
NB.2	If holes or openings have been made through the fabric of the premises due to the installation of a new boiler, have they been made good? (including condensate pipe, pressure relief valve, gas flue terminals)	7.7%

Cavity Wall Insulation		
Question No.	Question	Fail Rate
CWI.3	Does the current condition of the property suggest that it was suitable for the material that has been installed?	3.5%
CWI.4	Does the drilling pattern conform to the appropriate materials compliance certificate?	4.0%
CWI.5	Have all injection holes been filled?	4.0%

Loft Insulation (Top Up)		
Question No.	Question	Fail Rate
LITU.4	Has the loft hatch been insulated as specified in PAS 2030:2014?	5.6%
LITU.5	Has the loft hatch been draught proofed as specified in PAS 2030:2014?	8.5%
LITU.6	Where down lighters or services have been fitted through the existing ceiling, have any measures been taken to prevent air leakage around down lights into roof void?	3.6%

Loft Insulation (virgin)		
Question No.	Question	Fail Rate
LIV.3	Has insulation been cross laid to prevent cold bridging?	3.8%
LIV.4	Has the loft hatch been insulated as specified in PAS 2030:2014?	6.3%
LIV.5	Has the loft hatch been draught proofed as specified in PAS 2030:2014?	6.7%
LIV.6	Is a signed and completed virgin loft insulation declaration present in the loft?	3.8%

Score Monitoring

Score Monitoring is a compliance regime under ECO that requires suppliers to commission on-site inspections of at least 5% of measures installed in a quarter, conducted by an independent party. This is to ensure the carbon savings of measures delivered under ECO are calculated accurately and correctly reflect the characteristics of the premises where the measure was installed. Suppliers must rescore measures that fail a Score Monitoring inspection and may lose the savings associated with the measure if they do not do so. This part of the report covers the results of Score Monitoring conducted for ECO2 Quarter 5 (April 2016 – June 2016).

Suppliers must also monitor at least 3% of measures installed by a particular installer[4]. If the failure rate for an installer is greater than 20%, we consider the installer to be 'at risk' and they will be placed on a Pathway to Compliance. As part of this pathway, we may ask the supplier to provide us with additional monitoring or assurances for this supplier. For more information on the Pathways to Compliance, please see here.

Monitoring rates

Score Monitoring was conducted on 8,021 measures, corresponding to 6.85% of all measures that fall within the Score Monitoring requirement for the quarter (117,089)[5]. The graphs below show the monitoring rates for all notified measures in Quarter 5, by measure type (Fig. 7) and obligated supplier (Fig. 8). The average monitoring rate is again indicated in the top right columns, while the red line indicates the required level of Score Monitoring (5%). Percentages in the graphs are only shown for the most recent quarter. The three previous quarters have been included for comparison. Information on earlier quarters is available in previous reports. Note that Figures 7 and 9 only include those measure types for which 100 or more measures fell within the monitoring requirement for the quarter.

[4] The requirement for installers who deliver fewer than 100 measures in a quarter is for one measure to be monitored.
[5] For the definition of the monitoring requirement, please see our ECO2 Guidance: Delivery, sections 9.6 to 9.14. Please note that the difference between the number of measures that fall within the technical monitoring and score monitoring requirements is due to District Heating System (DHS) measures, which are excluded from score monitoring.

Fig. 7) Score monitoring rates as a percentage of all measures notified by measure type

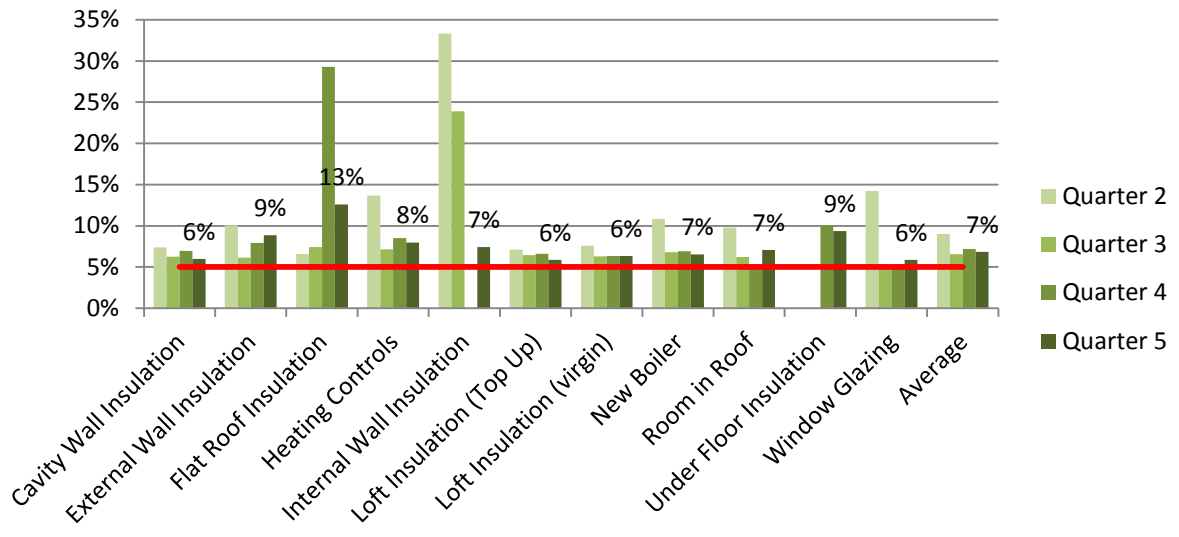
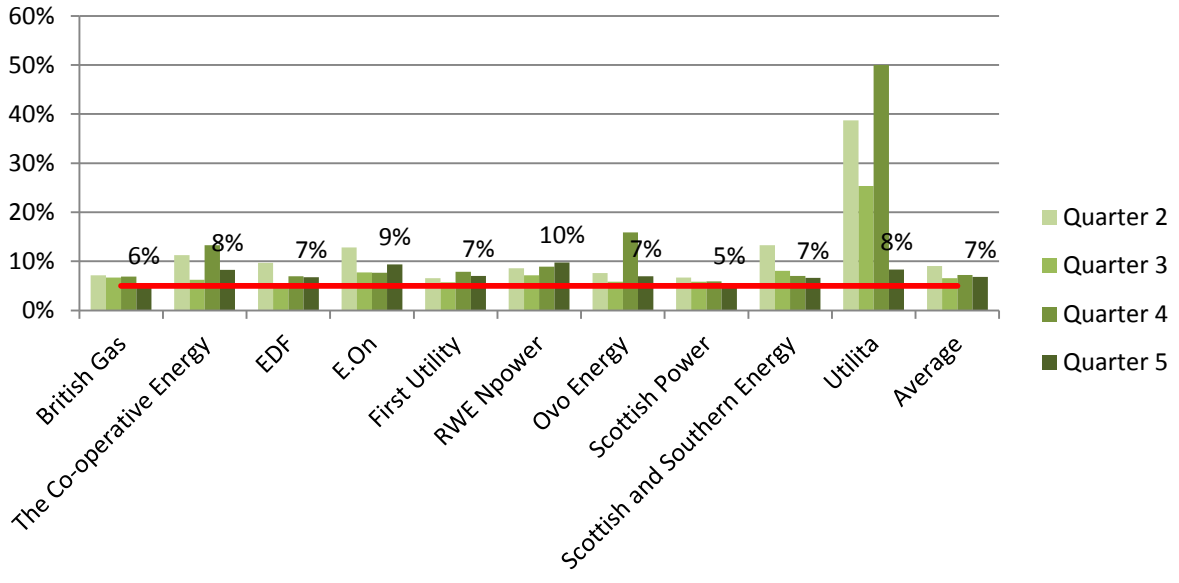


Fig. 8) Score monitoring rates as a percentage of all measures notified by supplier

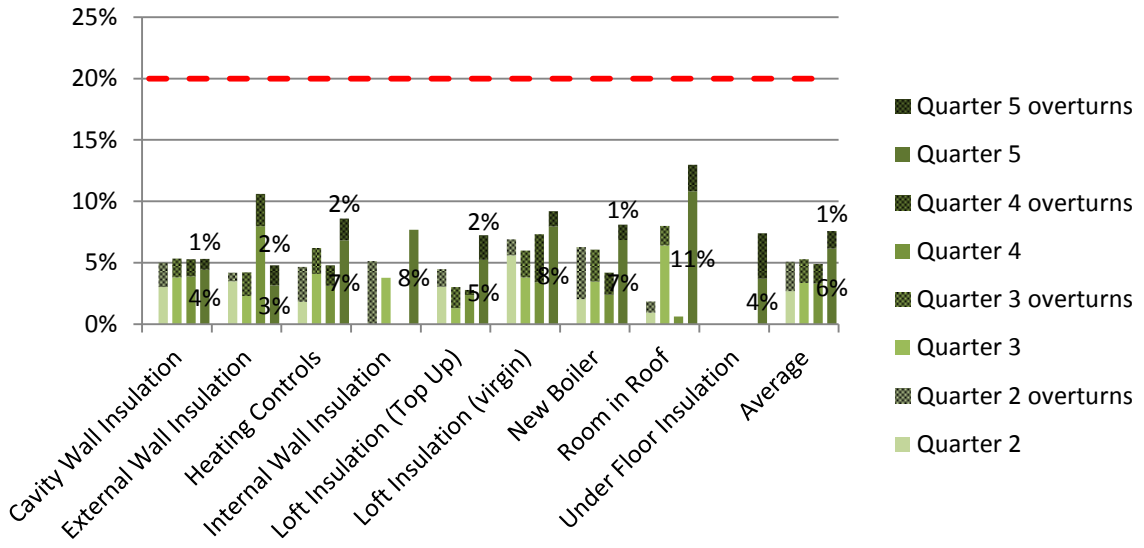


Failure rates

608 of the 8,021 measures monitored showed a discrepancy between the data recorded by the original assessor and the score monitoring agent (~8%). The graphs below provide the score failure rates for all monitored measures in Quarter 5 by measure category. The average failure rate for all measure categories/suppliers is given in the top right columns. The red line indicates the Score Monitoring failure threshold (20%). Percentages in the graphs are only shown for the most recent quarter. The three previous quarters have been included for comparison. Information on earlier quarters is available in previous reports.

Similar to Technical Monitoring, a Score Monitoring Agent may sometimes decide that their initial assessment was incorrect and overturn a previously reported fail. When suppliers report overturned inspections to us, we adjust the reported failure rates to take these into account. The number of overturned measures is represented by the dotted area at the top of the columns.

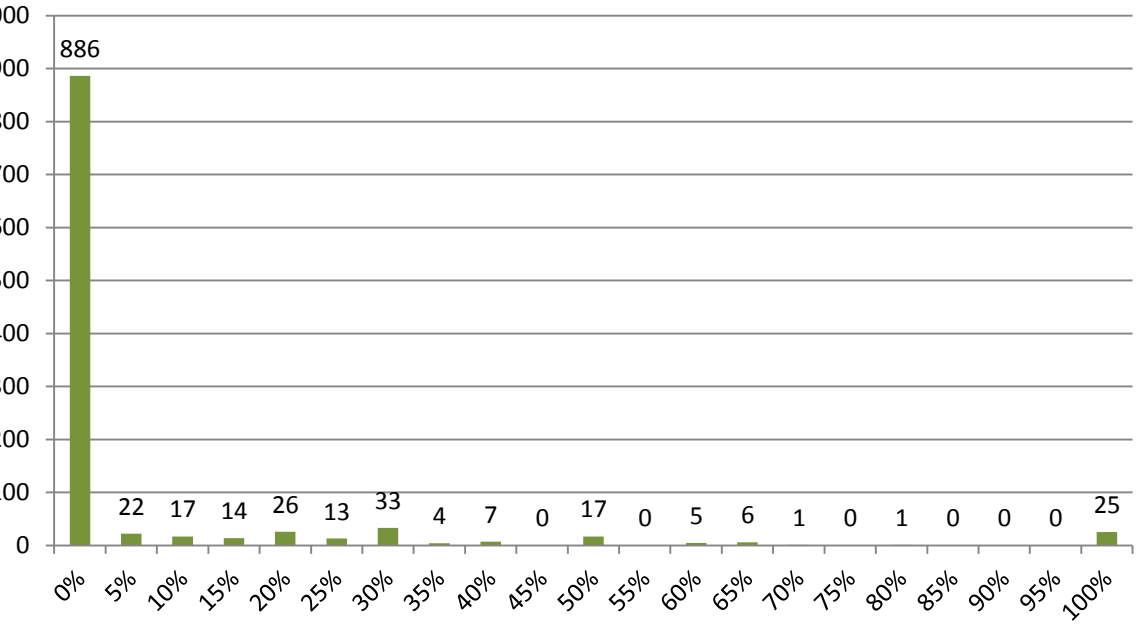
Fig. 9) Score monitoring failure rates as a percentage of all measures monitored by measure type



Industry Performance

The graph below shows the distribution of Score Monitoring failure rates per installer. It shows the number of installers within failure rate intervals of 5%.

Fig. 10) Distribution of installer failure rates



Pathways to Compliance

Across all suppliers, the total number of installers that were placed on a Pathway to Compliance for Score Monitoring was 94. This corresponds to 8% of the total number of installers whose measures were monitored in this quarter (1176). As in Figure 4, installers are counted separately for each supplier. Installers who are placed on a Pathway for more than one supplier are therefore counted multiple times. The total number of measures placed on the pathway is 11,643, amounting to 10% of all measures that fell within the Score Monitoring requirement for the quarter. Figure 11 shows the number of installers that have now been taken off a Pathway. Figure 12 shows the same for the number of measures.

Fig. 11) Number of installers on a Pathway to Compliance by quarter

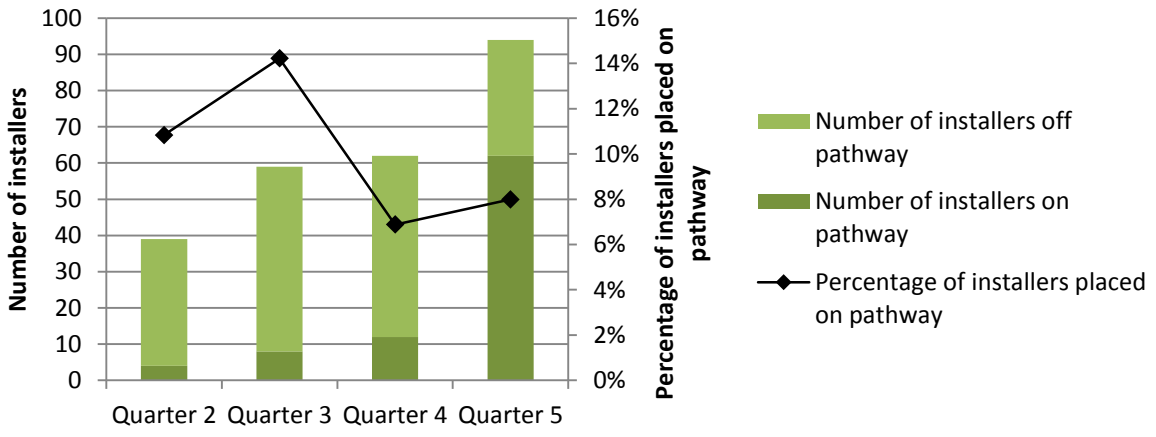
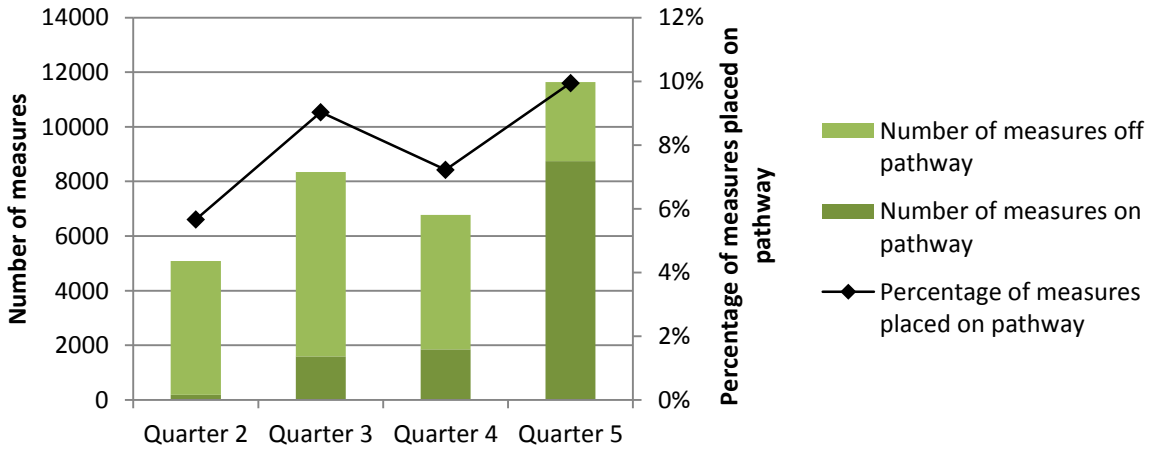


Fig. 12) Number of measures on a Pathway to Compliance by quarter



Quarter 5 saw a noticeable increase of the number of measures placed on a Pathway compared to Quarter 4. However, the percentage of installers placed on a Pathway increased only slightly. This suggests that, as with Technical Monitoring, Quarter 5 saw more large installers placed on a Pathway, averaging more measures per installer.

As with Technical Monitoring, on Score Monitoring the vast majority of measures for Quarters 2 and 3 have been taken off the Pathway. For Score Monitoring, this also applies to Quarter 4. This demonstrates that although initial concerns over the accuracy of scores have persisted, suppliers and installers have become better at providing the assurances needed to give us confidence in the accuracy of measure scores.

Commonly failed questions

The tables below list the most commonly failed questions for each measure type. Only questions that have a failure rate of 3% or higher have been included.

Boiler Replacement		
Question No.	Question	Fail Rate
SMQ.2	Does the floor area for each storey of the property match the SAP/RdSAP calculations to within 10%?	4.4%
SMQ.7	Does the type of post-installation heating controls match the type of post-installation heating controls SAP/RdSAP calculations?	3.5%

Heating Controls		
Question No.	Question	Fail Rate
SMQ.2	Does the floor area for each storey of the property match the SAP/RdSAP calculations to within 10%?	4.5%
SMQ.7	Does the type of post-installation heating controls match the type of post-installation heating controls SAP/RdSAP calculations?	3.8%

Loft Insulation (Top Up)		
Question No.	Question	Fail Rate
SMQ.13	Does the floor area for each storey of the property match the SAP/RdSAP calculations to within 10%?	3.4%
SMQ.18	Does the type of post-installation heating controls match the type of post-installation heating controls SAP/RdSAP calculations?	4.4%
SMQ.25	If less than 100% installed is the reason as claimed by supplier, does the reason match the reason provided to the supplier?	4.0%

Loft Insulation (virgin)		
Question No.	Question	Fail Rate
SMQ.13	Does the floor area for each storey of the property match the SAP/RdSAP calculations to within 10%?	4.2%
SMQ.18	Does the type of post-installation heating controls match the type of post-installation heating controls SAP/RdSAP calculations?	6.7%
SMQ.22	Is there any evidence of any pre-existing loft insulation? (if there is evidence of pre-existing insulation mark as fail)	4.2%
SMQ.25	If less than 100% installed is the reason as claimed by supplier, does the reason match the reason provided to the supplier?	7.5%

Room in Roof		
Question No.	Question	Fail Rate
SMQ.13	Does the floor area for each storey of the property match the SAP/RdSAP calculations to within 10%?	4.2%
SMQ.18	Does the type of post-installation heating controls match the type of post-installation heating controls SAP/RdSAP calculations?	3.0%
SMQ.24	Does the percentage of the measure installed match SAP/RdSAP calculations?	4.7%
SMQ.25	If less than 100% installed is the reason as claimed by supplier, does the reason match the reason provided to the supplier?	7.6%

Best Practice Monitoring

In addition to Technical Monitoring and Score Monitoring, suppliers may also conduct Best Practice Monitoring of the quality of installation of measures installed on their behalf.

Best Practice Monitoring is not a requirement, and suppliers will not lose savings for measures that 'fail' a Best Practice Monitoring question. Rather, Best Practice Monitoring is intended to encourage the adoption of best practices across the industry and in doing so drive further improvements in the quality of installation.

We did not receive any Best Practice Monitoring submissions for Quarter 5.

Still have questions?

For enquiries regarding ECO (with the exception of the media), please contact the ECO team via email at eco@ofgem.gov.uk. For all media enquiries, please contact Stuart Forsyth, Ofgem E-Serve's media manager (stuart.forsyth@ofgem.gov.uk).