

ECO4 Scoring Methodology consultation: Part 1 & 2

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In 2021 we consulted in two parts on our proposed scoring methodology for use in the upcoming ECO4 scheme. This document summarises the responses to both our consultations and details our final position. Where relevant, we also explain where we were unable to incorporate suggestions. The approach outlined in this document will apply to relevant measures installed under the upcoming ECO4 scheme.

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Introduction

Context and related publications

1.1. The Energy Company Obligation (ECO) is a government scheme that requires obligated energy companies to deliver energy efficiency measures to domestic premises in Great Britain. The policy and legislation for ECO is set by the Department for Business, Energy and Industrial Strategy (BEIS). ECO is administered by Ofgem.

1.2. ECO3 ran from 3 December 2018 to 31 March 2022. BEIS consulted¹ in summer 2021 on plans for a new Energy Company Obligation, ECO4. ECO4 is intended to run from 2022 to 2026.

1.3. BEIS's consultation describes their policy proposals for the new scheme and sets out their intent to require Ofgem to publish the scoring methodology. It proposes core requirements that the scoring methodology must meet. BEIS published the Government Response² to the consultation on 1 April 2022.

1.4. With input from BEIS, we have developed a proposed scoring methodology which fulfils these core requirements.

1.5. We consulted on the proposed methodology in two parts. The first part of our scoring consultation³ was published in August 2021 and covered our overall approach to scoring and full project scores. The second part of our scoring consultation⁴ was published in December 2021 and covered measure-specific scores and topics; this includes notification of measures, changes to existing measures, and new measures to be introduced in ECO4.

1.6. We have received stakeholder feedback to both consultations. This document summarises stakeholder responses and our decisions for both parts of our consultation.

¹ [Design of the Energy Company Obligation ECO4: 2022-2026](#)

² [ECO4: 2022 to 2026 – government response](#)

³ [Energy Company Obligation \(ECO4\) Consultation: scoring methodology - part 1](#)

⁴ [Energy Company Obligation \(ECO4\) Consultation: scoring methodology - part 2](#)

Our decision-making process

1.7. We received 17 responses to the first part of the consultation, and all addressed each question individually. One stakeholder requested their response was not published. The remaining 16 provided non-confidential responses.

1.8. We received 21 responses to the second part of the consultation. Of these, 20 addressed each question individually and one was a high-level response. Two stakeholders requested that their response was not published. The remaining 19 provided non-confidential responses.

1.9. The following chapters consider each consultation question in turn. We summarise responses received to each question. Where appropriate for the question, we have classified responses using a Likert scale⁵, and include a chart of the results. A data table for the charts is set out in Appendix 1.

1.10. Our decision and any changes we have made to our proposed approach is then set out, and our reasoning explained.

1.11. In developing our final position, we considered all points raised by all respondents, even if they are not specifically mentioned in this document. All responses, apart from any confidential information, are published on our website.

⁵ A Likert scale is used to represent people's attitudes to a topic. Typical responses are 'Agree', 'Disagree', etc.

Figure 1: Consultation and decision-making stages



Your feedback

General feedback

1.12. We believe that consultation is at the heart of good policy development. We are keen to receive your comments about this report. We'd also like to get your answers to these questions:

1. Do you have any comments about the overall quality of this document?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Are its conclusions balanced?
5. Did it make reasoned recommendations?
6. Any further comments?

Please send any general feedback comments to ECO@ofgem.gov.uk.

1. ECO4 Scoring Methodology Part 1: Questions 1 - 5

Section summary

This section outlines stakeholder responses and Ofgem’s decisions to the topics raised in questions 1 through to 5 of the ECO4 Scoring Methodology: Part 1. These questions concern full project scores and determining the finishing SAP rating.

Question 1: Do you agree that full project scores should be based on starting and finishing intermediate SAP bands?

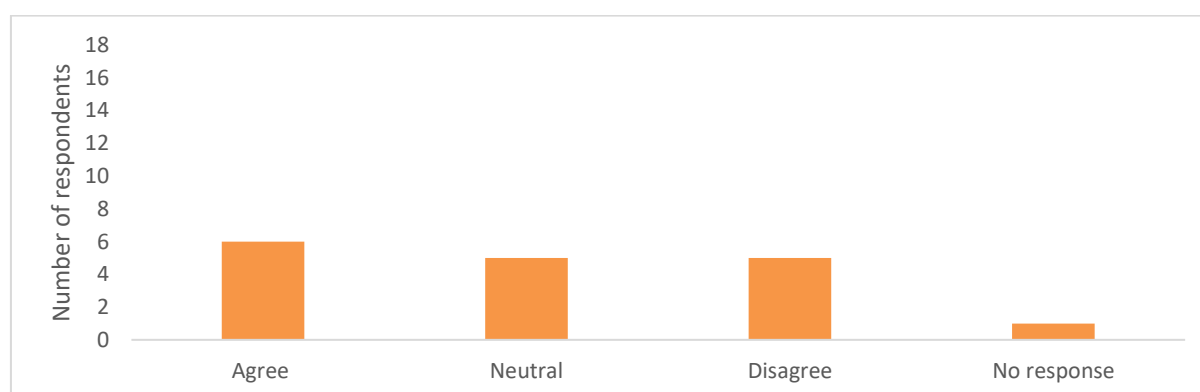
Question 2: Do you agree that scores should be segregated into four floor area segments?

Question 3: Do you agree with the methodology used to determine the full project scores?

Question 4: Are you aware of any further advantages or disadvantages in respect of the options presented to determine the finishing SAP band?

Question 5: What are your views on the advantages and disadvantages identified?

Question 1: Do you agree that full project scores should be based on starting and finishing intermediate SAP bands?



	Agree	Neutral	Disagree	No response
Number of stakeholders	6	5	5	1
% of stakeholders	38%	31%	31%	

Figure and Table 1: Summary of stakeholder feedback to question 1 of the ECO4 scoring consultation methodology part 1

Summary of responses

1.1. In our consultation we proposed a system of deemed scores based on 'intermediate' SAP bands, whereby each SAP band is split into 'high' and 'low' halves. Stakeholders who agreed commented that this would result in the deemed savings for ECO measures being more reflective of real life and would also aid in meeting the minimum requirement. Another respondent noted that intermediate SAP rating thresholds should be limited to rounded whole numbers for simplicity as these could be obtained directly from an EPC.

1.2. A stakeholder who disagreed with our approach commented that scores should be based on the difference in SAP rating points rather than bands, intermediate or otherwise. They reasoned that SAP rating points directly relate to the objective of the proposed scoring, and shouldn't be diluted by any banding.

1.3. Another stakeholder commented that for complex measures such as district heating systems (DHS), the underlying SAP values should be used and adjusted with the appropriate Coefficient of Performance⁶ (COP) and efficiencies per technology type.

1.4. A stakeholder with a neutral view on the topic suggested that the intermediate SAP rating thresholds should be limited to rounded whole numbers for simplicity. These could be obtained directly from an EPC and would remove the need for further calculation and could be easier to verify.

⁶ The Coefficient of Performance is the ratio between the heat produced per unit of electricity supplied to the heating system.

1.5. Some respondents raised issues which are not directly related to the question. One of the points raised is that a move away from deemed scores adds complexity to ECO4. They felt ECO3 deemed scores should be retained for the ECO4 scheme.

Ofgem response

1.6. We have decided to maintain our approach as proposed in the consultation. Full project scores (FPS) will be based on starting and finishing intermediate SAP bands.

1.7. We acknowledge the concerns raised surrounding DHS; however, we are required to develop scores in accordance with the SAP methodology. SAP differentiates only between CHP and non-CHP DHS systems, and we have provided partial project scores (PPS) for these two scenarios. We have also included a specific PPS for shared loop ground source heat pump (GHSP) in the final scoring matrix.

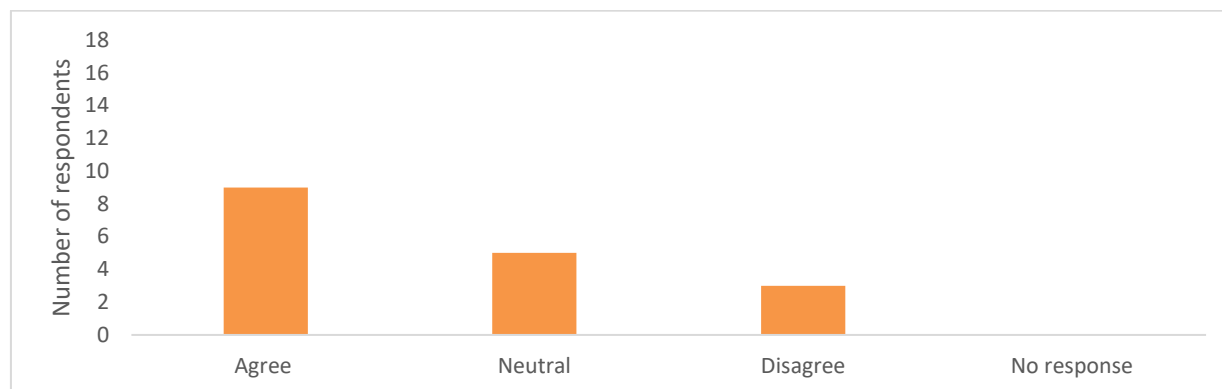
1.8. We considered the suggestion that scores should be based on SAP points for greater accuracy, however any minor discrepancies in assessments which come to light would then require revisions to scores. This would result in increased administrative burden. Under our chosen approach, there will be no need to revise scores where a discrepancy is small enough not to change the intermediate SAP band.

1.9. We note that the recommendation to state SAP rating thresholds as whole numbers. However we will continue to express the thresholds to one decimal place. This will not prevent SAP ratings from EPCs being used. However, we anticipate it will prevent confusion over rounding where projects include measures with Alternative Methodology (AM) or Data Light (DL) scores⁷. The finishing SAP rating for such projects may have a decimal place as they will include an extra element not part of a SAP assessment.

1.10. Evidence from previous ECO schemes suggests bespoke scores are more complicated and likely to be open to fraud. We strongly believe that intermediate SAP bands provide a sufficiently granular scoring system, whilst reducing opportunity for score inflation.

⁷ BEIS have proposed two routes whereby suppliers may apply for new scores to be created. One is a standard alternative methodology route and the second is a new "data light" route.

Question 2: Do you agree that scores should be segregated into four floor area segments?



	Agree	Neutral	Disagree	No response
Number of stakeholders	9	5	3	0
% of stakeholders	53%	29%	18%	

Figure and Table 2: Summary of stakeholder feedback to Question 2 of the ECO4 scoring consultation methodology part 1

Summary of responses

1.11. Stakeholders who agreed commented that the introduction of floor area segments would increase the installation of ECO measures into smaller properties, which have been disadvantaged by the scoring mechanism within previous schemes. It was noted that floor area segmentation would also result in fewer deemed scores than in the ECO3 scheme, and would reduce both complexity and the administrative burden.

1.12. A common point raised by respondents, who both agreed and disagreed with the proposed approach, was that scores for the largest floor area segment (over 200m²) are significantly larger than those for the smaller floor area segments. It was noted that scores for the three smaller floor segments increase gradually with floor size, but scores for the largest floor area segment are up to double those for the next closest segment.

1.13. Respondents also questioned whether the largest floor area segment would represent many ECO eligible homes, citing that less than 2% of lodged EPCs are for properties with a floor area exceeding 200m². Some respondents suggested that consideration should be given to setting the floor area ranges such that take up of ECO4 is more evenly split between the ranges.

1.14. A respondent who disagreed with our approach suggested that FPS should be generated by a post-project SAP assessment, which would take into consideration the exact floor area of the property.

Ofgem response

1.15. We will maintain our proposed approach and segregate the scores into the four floor area segments set out in our consultation. We note that most respondents agreed with our proposal. Modelling carried out by BEIS indicated that four floor segments is mostly likely to result in an even spread of delivery across domestic premises sizes. As outlined in the Government Response, BEIS plans to direct Ofgem to strike a more equitable distribution of ECO4 support across floor area size.

1.16. Initial modelling of floor area segments used three floor area bands, each representing approximately one third of the housing stock. The largest of the floor area bands contained outlier properties with significantly greater floor areas. FPS and PPS are calculated⁸ for each floor area segment using the median floor area for that segment. The outlier properties increased the median floor area of the larger segment and therefore its scores. Modelling showed that delivery could be disproportionately focussed on this segment, to the detriment of smaller homes.

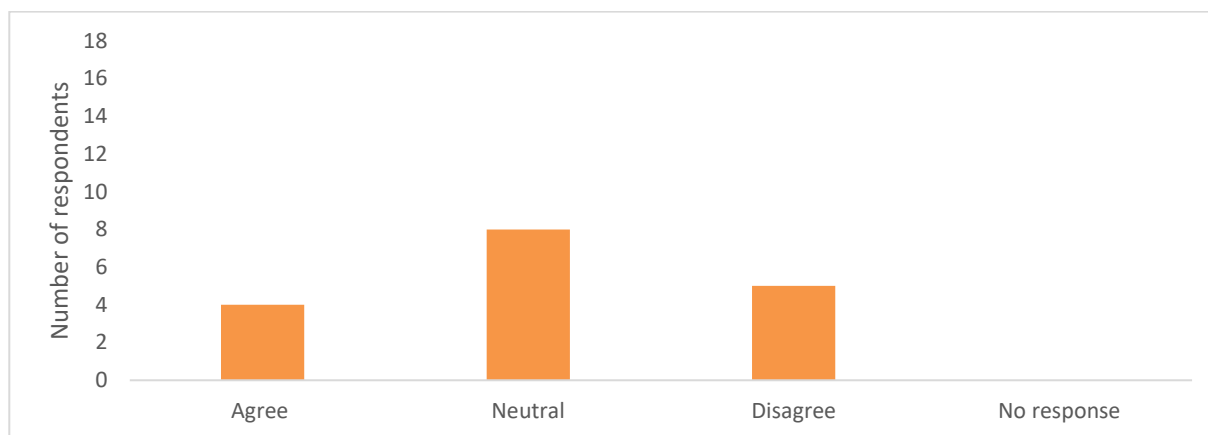
1.17. Dividing this floor area segment into two (resulting in a total number of four floor area segments) separated the outlier properties with very large floor from other properties in the same original band. Modelling suggests that this arrangement will provide more even incentives across the different size segments and avoids a focus on larger homes.

1.18. Modelling was conducted with a greater number of floor area segments; however, it was found that a greater number of floor area segments would result in reduced delivery of measures to properties in the smaller floor area segments. A greater number of segments is also likely to increase gaming risks.

⁸ Further information on calculating FPS and PPS can be found within the [BRE Client Report – Analysis to support ECO4 scoring system](#)

1.19. We note stakeholder concerns that scores for the largest floor area segment are significantly larger than those for other segments. However, this is a direct consequence of the segment containing some properties with very large floor areas.

Question 3: Do you agree with the methodology used to determine the full project scores?



	Agree	Neutral	Disagree	No response
Number of stakeholders	4	8	5	0
% of stakeholders	24%	47%	29%	

Figure and Table 3: Summary of stakeholder feedback to Question 3 of the ECO4 scoring consultation methodology part 1

Summary of responses

1.20. Many respondents used their responses to this question to comment on aspects of the overall scoring methodology, rather than the specific approach used to calculate FPS.

1.21. One stakeholder who commented on the specific approach noted that the calculations align with SAP and ensure consistency with EPC band eligibility. However, they also noted that the FPS appeared higher than the combined un-deflated PPS.

1.22. One respondent suggested that the scores should be based on SAP 10.2 rather than SAP 2012, and that scores should be compared to actual cost savings realised. They also questioned whether cost savings should be independent of fuel types. Another respondent suggested scores could be revised during the scheme based on data on measure performance.

1.23. A further respondent questioned whether it was consistent to base FPS on the numerical midpoint of each intermediate SAP band, but not on the numerical midpoint of each floor area segment (instead the median of the English Housing Survey data for each floor area segment is used).

1.24. Other comments received from stakeholders concerned aspects of the overall scoring approach, rather than the specific approach used to produce the FPS.

1.25. Five stakeholders are of the view that having two scoring systems (FPS and PPS) is unnecessarily complex.

1.26. Three respondents suggested that scores for completed projects are directly based on pre and post RdSAP/SAP assessment results, rather than using the proposed deemed scores approach. Two suggested that separate FPS are not required and completed projects could receive un-deflated PPS.

1.27. Two stakeholders expressed the view that district heating system connections are more complex than other measures and deemed scoring approaches are not suitable for these.

1.28. A further respondent commented on the approach used to determine the finishing SAP rating within the proposed deemed approach, expressing a preference for the calculation-based option.

Ofgem response

1.29. Whilst we recognise that some respondents have concerns with the overall approach to scoring, the methodology must align with core requirements set out by BEIS.

1.30. Whilst some stakeholders consider two scoring systems to be complex. However as scheme administrator, Ofgem is required to provide a scoring methodology consisting of FPS and PPS. The dual scoring system approach is a result of the need to balance the whole-house approach to retrofit with the management of risks raised by the supply chain around timeframes for payments, and the impact on the remainder of a project of a single measure failing.

1.31. BEIS's consultation and Government Response sets out their preference for a deemed approach to FPS based on intermediate SAP bands and floor area segments. The scores proposed are in line with this approach.

1.32. A small number of stakeholders suggested FPS are based on actual RdSAP/SAP assessment outputs instead. However, we remain of the view that this approach would increase risk and administrative burden, because even minor errors in assessments would require projects to be rescored.

1.33. We also disagree with the suggestion that, instead of FPS, PPS could be 'un-deflated' when the minimum requirement is met. We consider that it wouldn't fully meet the BEIS's core requirement for FPS, which is that they must be based on the difference in average annual bill expenditure between the starting and finishing SAP ratings of the property, reinforcing the whole house approach. This approach would also have similarities to the calculated approach to determining the finishing SAP rating. We set out our reasons for rejecting this approach in our response to question 3 in part 2.

1.34. We also confirm that we will take forward the methodology used to calculate the FPS as proposed in our consultation.

1.35. Both FPS and PPS are accurately calculated through their respective methods. As such, the FPS achieved by completed projects are naturally on average equal to the combined, un-deflated PPS for the individual measures.

1.36. We recognise that SAP 2012 is shortly to be replaced by SAP 10.2. However, it has not been possible to develop a scoring system based on SAP 10.2 as development had to start before SAP 10.2 was finalised. Our understanding is that ECO4 legislation will instruct us to calculate scores with reference to SAP 2012. As outlined in the Government Response, BEIS may consider an update of scores during the scheme, depending on the outcome of any analysis of SAP 10 scores and the impact on the scheme. Ahead of any decision to update scores, BEIS have indicated they would consult stakeholders.

1.37. One stakeholder suggested FPS should take account of the type of fuel used for heating. This is already the case – the starting and finishing SAP ratings which determine the FPS to be awarded take account of fuel type.

1.38. We consider it appropriate to base the FPS on the numerical midpoint of each SAP band, as there are enough divisions that the distribution of homes within each band will

be relatively even. However, there are relatively few floor area segments, and the distribution of properties within the highest and lowest segments in particular is uneven. The use of the median value rather than the midpoint allowed this uneven distribution to be taken account of, and means that scores better represent the majority of homes.

1.39. DHS measures will be dealt within our response to Question 17 & Question 19 in part 2 of our scoring consultation.

Question 4: Are you aware of any further advantages or disadvantages in respect of the options presented to determine the finishing SAP band?

Question 5: What are your views on the advantages and disadvantages identified?

1.40. Questions 4 and 5 sought stakeholders' views on options for determining the finishing SAP band of homes receiving an ECO4 project. We also provided stakeholders further opportunity to comment on topics in question 3 of the second part of our consultation. To avoid repetition, we have summarised responses to all three questions under question 3 of the second consultation (page 42 of this document). Our decision on this topic is set out following the summary.

2. ECO4 Scoring Methodology Part 1: Questions 6 -10

Section summary

This section outlined stakeholder responses and Ofgem’s decisions to the topics raised in questions 6 through to 10 of the ECO4 Scoring Methodology: Part 1. These questions concern partial project scores.

Question 6: Do you agree with the proposal to use pre-calculated deemed partial project scores based on the floor area, and starting intermediate SAP band?

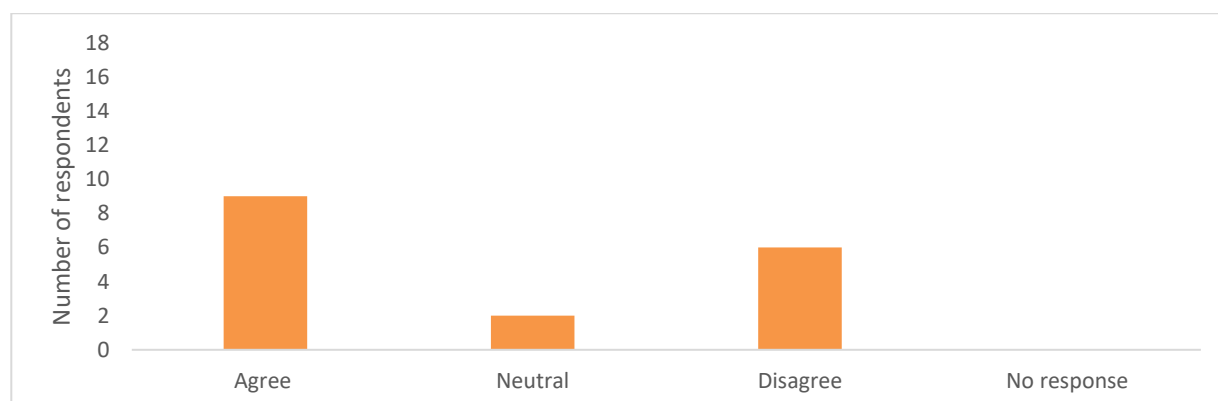
Question 7: Do you agree with the process used to develop the partial project scores?

Question 8: Do you agree with the use of a single fixed correction factor to account for interactions between measures?

Question 9: Do you agree with the use of the actual percentage of property treated to determine the partial project score for a measure?

Question 10: Do you agree with our proposal to calculate the innovation measure uplift by using the partial project score for the innovation measure?

Question 6: Do you agree with the proposal to use pre-calculated deemed partial project scores based on the floor area, and starting intermediate SAP band?



	Agree	Neutral	Disagree	No response
Number of stakeholders	9	2	6	0
% of stakeholders	53%	12%	35%	

Figure and Table 4: Summary of stakeholder feedback to Question 6 of the ECO4 scoring consultation methodology part 1

Summary of responses

2.1. Responses from obligated energy suppliers show a preference for pre-calculated deemed PPS based on the floor area and starting intermediate SAP band. Most responses from supply chain members disagreed with our proposed approach.

2.2. Of those respondents who agreed, three gave the simplicity of the approach as their reason. One also mentioned the ability to forecast scores before starting work. Most did not state a reason.

2.3. Several of the respondents who agreed also raised some concerns. Two consider PPS in their entirety an unnecessary complexity. Another considers the chosen approach to be complex and to result in significant risk for the supply chain, which could limit the involvement of smaller companies in ECO.

2.4. One energy supplier raised concerns regarding the impact of the deflator. They anticipate that the supply chain will price measures according to the deflated score, and as a result the £1 billion spending envelope for the scheme could be breached.

2.5. Of those respondents who disagreed, three refer to the general complexity of PPS and commented that the proposed PPS could result in cash flow issues. Two are of the view that scoring should be by SAP assessment throughout and commented that this will ensure scores are project specific throughout the process. Three are opposed to the deflator, with two suggesting that rather than applying a deflator to PPS, a multiplier should be applied to completed project scores.

Ofgem response

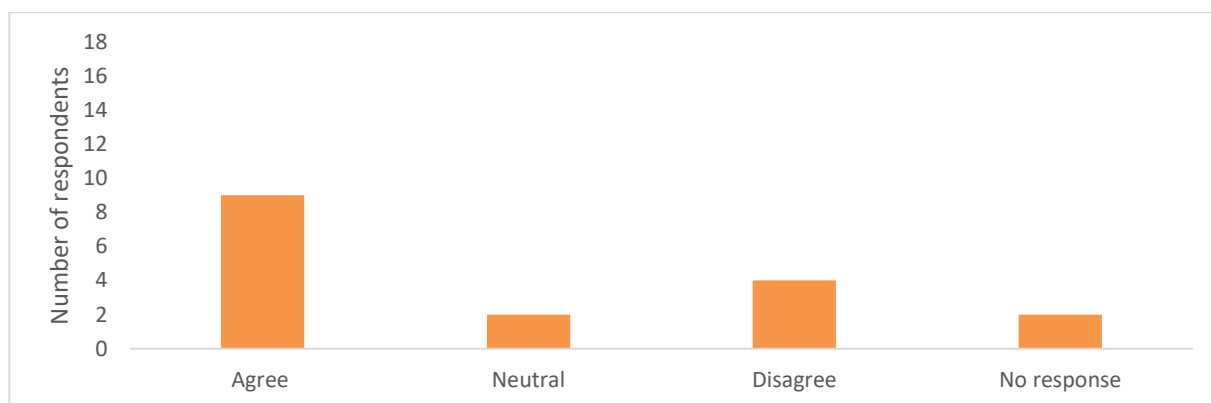
2.6. We will implement our proposal for pre-calculated, deemed PPS based on the floor area and intermediate SAP band.

2.7. We note that most respondents agreed with this approach, and we agree with comments on its simplicity. We consider the minimal data requirements to be a key benefit, along with the fact that the PPS for a measure will be the same whether it is installed first or last within a project. These points mean that PPS can be quickly forecast at the start of a project.

2.8. A few stakeholders expressed their preference for scoring individual measures using SAP assessments, however we disagree with this approach as it adds complexity. Additional data collection and checking would be required. Furthermore, the PPS would depend on the order of installation, with earlier measures potentially receiving higher scores. Where a measure is rejected, subsequent measures in a project would need to be re-scored. This would increase administrative burden for participants.

2.9. We note stakeholder concerns regarding the deflator that will be applied to PPS, however this will be part of the scheme legislation and we will not have any discretion in this area. Further information on the deflator can be found in BEIS’s ECO4 consultation and Government Response.

Question 7: Do you agree with the process used to develop the partial project scores?



	Agree	Neutral	Disagree	No response
Number of stakeholders	9	2	4	2
% of stakeholders	60%	13%	27%	

Figure and Table 5: Summary of stakeholder feedback to Question 7 of the ECO4 scoring consultation methodology part 1

Summary of responses

2.10. As with the previous question, energy suppliers generally agreed with the process, whereas other members of the supply chain were more likely to disagree.

2.11. Few comments directly addressed the process used to develop the PPS. One respondent noted that scores did not reflect the cost of installing measures and suggested a bottom-up approach which takes account of installation costs would increase supply chain confidence. Two respondents stated their preference for scoring to be based on SAP assessments.

2.12. Eight stakeholders raised their concerns with the application of the deflator, with the primary concern being that the deflator is too large.

Ofgem response

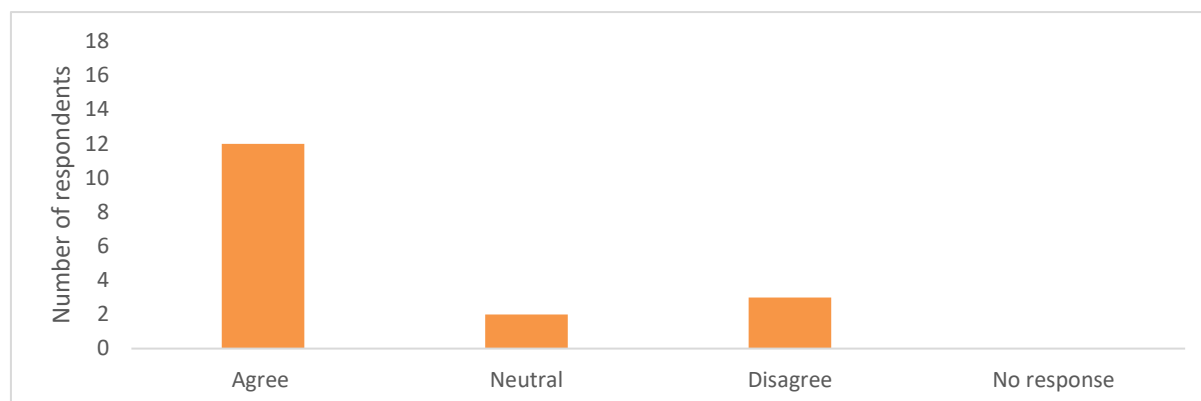
2.13. Our decision is to move forward with the proposed approach to developing the PPS. We note that most stakeholders agreed with our proposals.

2.14. Scheme rules will require that the PPS for a measure represents its average annual energy bill savings. We are not able to consider installation costs within the development of PPS.

2.15. Two stakeholders expressed a preference for PPS to be based on SAP assessments. We disagree with this scoring approach; we consider it would be more complex, for the reasons set out in our response to question 6 above.

2.16. We note that many respondents raised concerns regarding the deflator which will be applied to PPS. However, this will be part of the scheme legislation and we will not have any discretion in this area. Further information on the deflator can be found in BEIS's ECO4 consultation and Government Response.

Question 8: Do you agree with the use of a single fixed correction factor to account for interaction between measures?



	Agree	Neutral	Disagree	No response
Number of stakeholders	12	2	3	0
% of stakeholders	71%	12%	18%	

Figure and Table 6: Summary of stakeholder feedback to Question 8 of the ECO4 scoring consultation methodology part 1

Summary of responses

2.17. Our consultation explained that a correction factor must be applied to the average energy bill savings for each measure. This is because the savings are determined by modelling each measure in isolation, when in reality there is interaction between measure savings when they are installed as part of multi-measure projects. This interaction results in a small reduction in total savings. The reduction is larger for projects which involve upgrading a home’s heat source than for projects which involve only insulation measures.

2.18. Our preference was to use a single fixed correction factor, however other options were considered, such as having different correction factors depending on the types of measures involved in the project.

2.19. The majority of stakeholders agreed with the use of a single correction factor to account for interactions between measures. Several noted that the single fixed correction factor is a straightforward approach and allows for flexibility around the order of measure installation within a project.

2.20. One stakeholder partially agreed to our proposal and commented that the use of a fixed correction factor should be supplemented by a further multiplier that can be applied if real world measurements are provided by the energy supplier.

2.21. Three stakeholders did not agree with our approach; however, no alternative suggestions were presented. One respondent commented that the correction factor would be difficult to explain to the installers and supply chain, however they did not provide further details.

Ofgem response

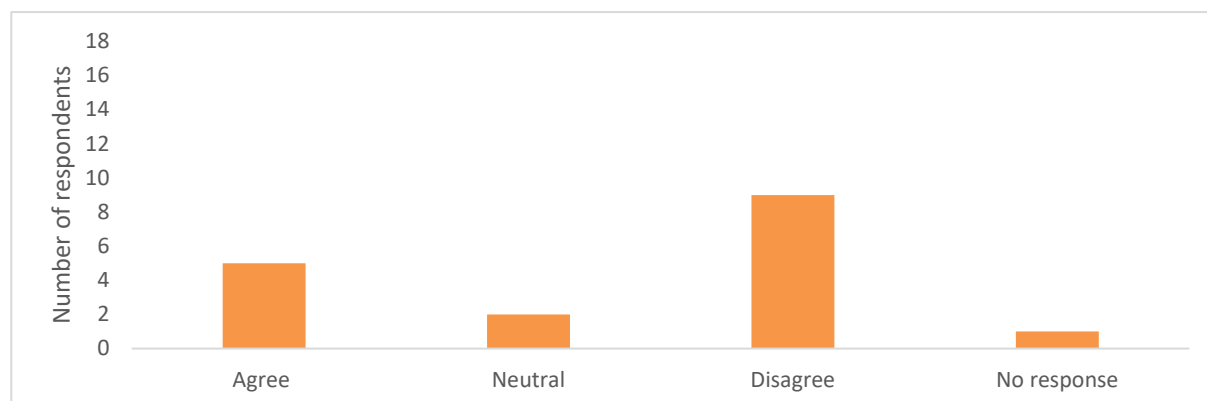
2.22. We have decided to implement the initial proposal to use a single fixed correction factor in the development of PPS for ECO4 Scheme.

2.23. We note that most stakeholders agree with our proposal to use a single correction factor. We believe that a single correction factor applied to the PPS will reduce complexity and simplify administration. It will also provide certainty to the supply chain, as the PPS will remain independent of other measures installed in the project.

2.24. We disagree with the suggestion to apply a multiplier where a supplier provides additional cost saving data, as it would significantly increase complexity. It would also require us to set a higher baseline correction factor, as the remaining projects would likely be those with higher levels of interaction between measures.

2.25. In our consultation we set out the methodology we proposed to use to calculate the correction factor required. When applied to the 10 example measures developed for consultation 1, this suggested a correction factor of 6.8%. Repeating the same process now that the full range of measures is available suggests a slightly higher correction factor of 10%. The final set of PPS therefore include a correction factor of 10%.

Question 9: Do you agree with the use of the actual percentage of property treated to determine the partial project score for a measure?



	Agree	Neutral	Disagree	No response
Number of stakeholders	5	2	9	1
% of stakeholders	31%	13%	56%	

Figure and Table 7: Summary of stakeholder feedback to Question 9 of the ECO4 scoring consultation methodology part 1

Summary of responses

2.26. In our consultation we proposed that, where a measure treats only part of a property, the PPS must be multiplied by the percentage of property treated (POPT). This would be a change to the 'average treatable area' approach used in ECO3, whereby published deemed scores included an average POPT factor and could be notified unchanged provided the measure was installed to at least 67% of the property.

2.27. The majority of respondents disagreed with our proposals. Obligated energy suppliers were particularly opposed. One argument given was that the reduction to PPS is unnecessary, given that the PPS will already be reduced by a policy deflator and correction factor, and will be overtaken by FPS at project conclusion.

2.28. The second common view was that the use of actual percentage of property treated created a large administrative burden in ECO2t. Stakeholders referenced

Ofgem's ECO2t review of POPT,⁹ which acknowledged the administrative burden on the supply chain.

2.29. Some respondents also commented that high installation percentages are commonplace. They argued that in ECO4, PAS 2035 Retrofit Coordinators will ensure that this will continue. They felt that POPT should be dealt with as part of the PAS 2035 process and is a matter for TrustMark instead.

2.30. Whilst 5 respondents agreed with our proposed approach, none gave further comments on their reasoning.

Ofgem response

2.31. We have decided to adopt the average treatable area approach to POPT used in ECO3, rather than continue with the approach proposed in our consultation. This means that in ECO4, an average treatable area factor will be applied to all PPS. Suppliers will be able to claim the PPS without adjustment if more than 67% of a measure is installed. If less than 67% of the measure is installed, the exact POPT should be notified, and the PPS reduced.

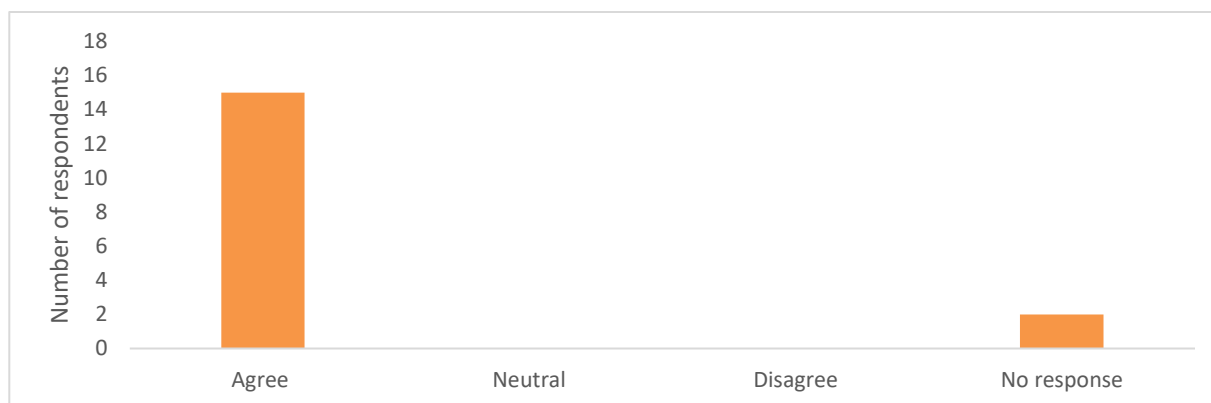
2.32. Although the PPS are already reduced by a policy deflator and correction factor and will be overtaken by the FPS at project conclusion, a key aim of the overall scoring approach is that the FPS for a project should be greater than the sum of the PPS. This ensures that scores will be upgraded rather than downgraded on project completion. If POPT is not considered in PPS, this will be hard to achieve, as the PPS will not be reflective of the measures installed.

2.33. We have taken on board supplier's feedback around the additional administrative burden created by the notification of exact POPT for all measures. Suppliers assume in their responses, that the PAS process ensures high installation percentages are the norm and therefore requiring notification of exact POPT increases complexity. This argument suggests that the average treatable area approach has been successful in reducing administration.

⁹ Further information on our ECO2t review of POPT is found here:
<https://www.ofgem.gov.uk/publications/eco2t-percentage-property-treated-popt-review>

2.34. We understand that as part of the PAS 2035 process, the most appropriate level of measure installation for each property will be determined. However, we still require the notification of POPT to ensure the score awarded represents the measure installed.

Question 10: Do you agree with our proposal to calculate the innovation measure uplift by using the partial project score for the innovation measure?



	Agree	Neutral	Disagree	No response
Number of stakeholders	15	0	0	2
% of stakeholders	100%	0%	0%	

Figure and Table 8: Summary of stakeholder feedback to Question 10 of the ECO4 scoring consultation part 1

Summary of responses

2.35. All stakeholders who provided a response to this question agreed with the proposal. No suggestions or concerns were raised in relation to the method employed to calculate the innovation measure uplift.

2.36. One stakeholder requested further clarity on the requirements for the innovation measure uplift, and one response highlighted the need for more information on the pay for performance mechanism.

Ofgem response

2.37. BEIS have outlined in the Government Response that the innovation uplift will apply to the PPS for the innovation measure rather than be set relative to other

measures in the package. This mechanism correlates with our proposal, to which all responding stakeholders were in agreement.

2.38. This mechanism will allow the innovation uplift to be applied to the deflated PPS, as soon as the innovation measure installation is approved. After project competition, the uplift will be recalculated using the un-deflated PPS and added to the FPS.

2.39. We acknowledged the comment regarding pay for performance; this topic was not included in our scoring consultation. Government plans to introduce the pay-for-performance mechanism later in ECO4. Further details on the pay-for-performance mechanism is covered in the Government Response.

3. ECO4 Scoring Consultation Part 1: Questions 11 - 13

Section summary

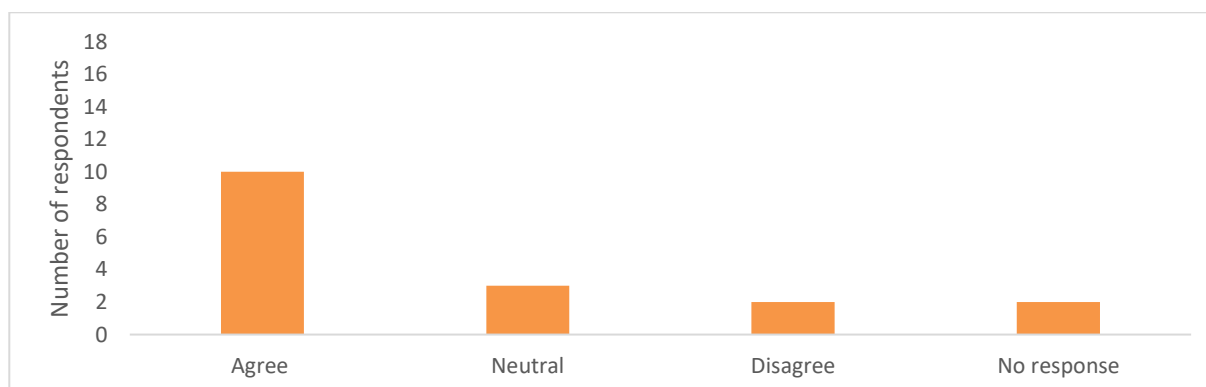
This section outlined stakeholder responses and Ofgem’s decisions to the topics raised in questions 11 through to 13 of the ECO4 Scoring Methodology: Part 1. These questions concern alternative methodology.

Question 11: Do you agree with our proposal to have two routes for new measures to enter the ECO4 scheme – a standard alternative methodology route and a new “data light” route?

Question 12: Do you agree with our proposed evidence requirements for the data light route? If not, please inform us of your preferred requirements.

Question 13: Do you think we should have additional mechanisms, such as a review stage or an open call for evidence, to account for the inherent risk associated with data light scores?

Question 11: Do you agree with our proposal to have two routes for new measures to enter the ECO4 scheme – a standard alternative methodology route and a new “data light” route?



	Agree	Neutral	Disagree	No response
Number of stakeholders	10	3	2	2
% of stakeholder	67%	20%	13%	

Figure and Table 9: Summary of stakeholder feedback to Question 11 of the ECO4 scoring consultation part 1

Summary of responses

3.1. Most respondents agreed with the proposal to have two application routes for new scores to be created in ECO4 – a standard alternative methodology route and a new “data light” route.

3.2. Respondents who agreed highlighted the benefits of having a simpler data light route for measures not recognised in SAP to enter ECO. They felt this would help support new technologies by reducing the complexity of evidence required. However, they would welcome further detail on how the routes will work in practice, and what the application requirements will be.

3.3. A common point raised in responses was the timely assessment of applications and the need to prevent barriers to new measures entering the scheme. Some stakeholders suggested we introduce defined service level agreements for application reviews and decisions.

3.4. Concerns were also raised over our suggestion that manufacturers of similar products could work together. Stakeholders felt that cooperation could be difficult due to commercial confidentiality and the potential for products to be competing against each other.

3.5. Two stakeholders did not agree with our proposal. They raised concerns over the complexity of the process and felt that a single route would be simpler. They felt there was no need for a standard alternative methodology route for measures that are already included recognised in SAP.

3.6. A few responses highlighted issues with the current ECO3 innovation process and mentioned the involvement of the Technical Assessment Panel (TAP) in assessing applications. They had conflicting views, with one respondent favouring input from the

TAP and another advocating for expert input from the Building Research Establishment (BRE) rather than the TAP.

3.7. One stakeholder also disagreed with installing new measures in fuel poor households and raised concerns over applicants potentially claiming inflated cost savings.

Ofgem response

3.8. We intend to implement two application routes for new scores in ECO4.

3.9. The first is the standard alternative methodology route for technologies that do not fit within an existing ECO measure type. We expect the technology will have extensive evidence to support the space heating cost savings.

3.10. Stakeholders questioned the need for technologies which are recognised in SAP, but not an ECO measure, to apply via the standard route for a score. However, the application is necessary to ensure the technology provides a space heating saving and can be notified correctly and can be integrated with PPS.

3.11. The second route is the new “data light” route for technologies not recognised in SAP and that do not fit within an existing ECO measure. This is intended to allow for the creation of scores where the technology demonstrates a space heating saving but there is less extensive evidence.

3.12. Measures approved via both routes will be able to be installed as part of an ECO4 retrofit project and count towards the relevant minimum requirement.

3.13. By having two routes available for new technologies to enter the scheme it could help overcome the existing barriers to wider SAP inclusion and support developments in the energy efficiency market. We do not believe a single route would provide the same benefits.

3.14. We appreciate stakeholders’ feedback on the difficulties with the existing ECO3 alternative methodology application process, including the length of time taken to assess applications. We also recognise the need for further detail on how the routes will work in practice, and more clarity on the requirements.

3.15. We plan to publish the New Measures and Products guidance which will detail the application process for both routes and provide more information on the required evidence. As part of the guidance development, we will also consider the suggestions to introduce defined response time targets for applications and decisions. Stakeholders will have an opportunity to comment on the draft guidance through part 2 of our administration consultation due to be published in spring 2022.

3.16. The aim is for the process and guidance to be clear, with reasonable evidence requirements which are robust enough to form the basis of an ECO score. We also intend to require applicants to demonstrate evidence of relevant standards.

3.17. We do not intend to require manufacturers of similar products to work together with an obligated supplier to apply, but it will remain an option. It may make the application process simpler by increasing the availability of supporting evidence and allow a more comprehensive measure description.

3.18. A few responses highlighted issues with the current ECO3 innovation process and mentioned the involvement of the TAP in assessing applications. The ECO3 innovation process is separate from the alternative methodology process, the intent is for these processes to remain distinct in ECO4. We did not consult on involving the TAP in the alternative methodology process and do not plan to involve the TAP in this aspect of the scheme.

Question 12: Do you agree with our proposed evidence requirements for the data light route?



	Agree	Neutral	Disagree	No response
Number of stakeholders	16	0	0	1
% of stakeholders	100%	0%	0%	

Figure and Table 10: Summary of stakeholder feedback to Question 12 of the ECO4 scoring consultation part 1

Summary of responses

3.19. Almost all stakeholders who responded to this question agreed with our proposal to have less extensive evidence requirements for the data light route.

3.20. However, respondents noted that the consultation only presents high-level detail on the requirements. They felt it would be helpful to have further information on the type and the amount of evidence expected to demonstrate the cost-saving of a measure. Stakeholders suggested that clearly defining terms concerning evidence would also be beneficial.

3.21. Simplifying the evidence requirements was identified as a key aspect to ensure the success of this route. If not, stakeholders felt there was a risk that overly complex requirements will act as a barrier to new measures being approved via this route.

3.22. Two respondents suggested further engagement with suppliers and manufacturers to determine appropriate evidence requirements.

3.23. One respondent raised concerns around the potential risk of having less extensive requirements as it could lead to an artificial inflation of savings.

3.24. Another stakeholder did not agree that measures approved via this route should be capped at 5,000 measures. They felt this was too limiting and will be very hard to administer if more than one supplier is promoting the same measure independently.

Ofgem response

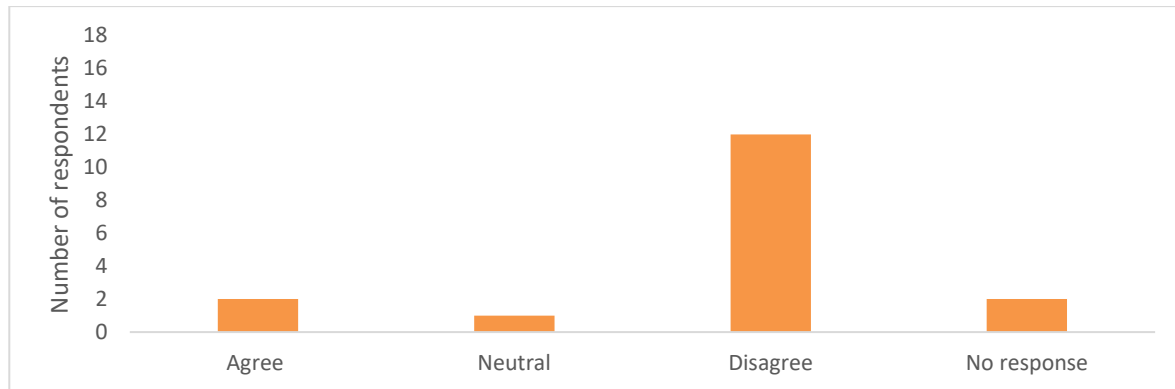
3.25. We recognise the need to clearly define the application requirements and provide further information on the evidence expected to demonstrate the heating cost-saving of a measure. We plan to create more extensive guidance for new measures which will include details of the application process, the requirements, definitions of key terms, and examples of evidence to support space heating cost savings.

3.26. We also understand the need to involve stakeholders in this process and obtain their feedback. We will publish a draft version of this guidance for stakeholders to provide feedback on.

3.27. We appreciate concerns raised around the risk to have less extensive evidence to demonstrate cost savings, as it could potentially lead to less accurate scores. We will seek to reduce this through a robust application process, with input on savings and evidencing requirements from relevant technical consultants.

3.28. The measure cap set by Government will work to mitigate this risk further. The cap of 5,000 measure will be distributed across suppliers based on the size of their obligation. We acknowledge some suppliers raised concerns that the size of this cap may be limiting, however as this is set by Government, we do not scope to change this element.

Question 13: Do you think we should have additional mechanisms, such as a review stage or an open call for evidence, to account for the inherent risk associated with data light scores?



	Agree	Neutral	Disagree	No response
Number of stakeholders	2	1	12	2
% of stakeholder	12%	6%	71%	

Figure and Table 11: Summary of stakeholder feedback to Question 13 of the ECO4 scoring consultation part 1

Summary of responses

3.29. Most stakeholders do not think we should have any additional mechanisms to account for the risk associated with the data light route.

3.30. There was a consensus that the delivery cap on data light measure sufficiently lowers the risk, and no further mechanisms are required. Respondents highlighted that we should aim to keep the process simple. It was felt that additional steps would slow the process down and act as a barrier to new technologies entering ECO.

3.31. One supplier felt governance should proportionate. Measures that claim smaller savings should receive less scrutiny than measures which claim much larger savings.

3.32. A stakeholder suggested that the application process should include a presentation of the data and technology to Ofgem. They felt this would ensure the technology is easily understood and highlighted that this stage was successful in previous schemes.

3.33. Only two stakeholders agreed with this proposal. They felt that this process could work if there was a sufficient notice period for any changes and that the decision criteria for reviews was clear.

3.34. One respondent suggested that data light measures could be installed with performance monitoring to help validate the savings achieved.

Ofgem response

3.35. We note stakeholders concerns that further mechanisms have the potential to delay the application process. We also appreciate the importance of ensuring the process is straightforward to prevent barriers to new technologies entering the scheme.

3.36. Taking on board stakeholder's feedback, we do not plan to have a formal review process for the score at the end of the obligation phase or assign a data light PPS for a defined period. However, we will continue to review any new evidence concerning a data light measure and we may revise the data light measure score if necessary. Any revisions will be applied to future measures and will only be applied retrospectively to previously notified measures where there are grounds to do so.

3.37. We acknowledge the suggestion that the application process could include a presentation of the data and technology, to help understanding. We plan to improve communication with applicants and as part of this, we intend to discuss the technology and the available data with the applicant to determine the most appropriate route.

3.38. We do not plan to introduce performance monitoring for data light measures as this is not within the scope of this route and it would increase administration and delivery costs.

3.39. We also appreciate that governance should be proportionate and plan to allow the evidence requirements to vary depending on the technology type and the mechanism by which it results in a heating cost saving. We will include further details in our draft New Measures' and Products guidance.

4. ECO4 Scoring Consultation Part 2: Questions 1 - 3

Section summary

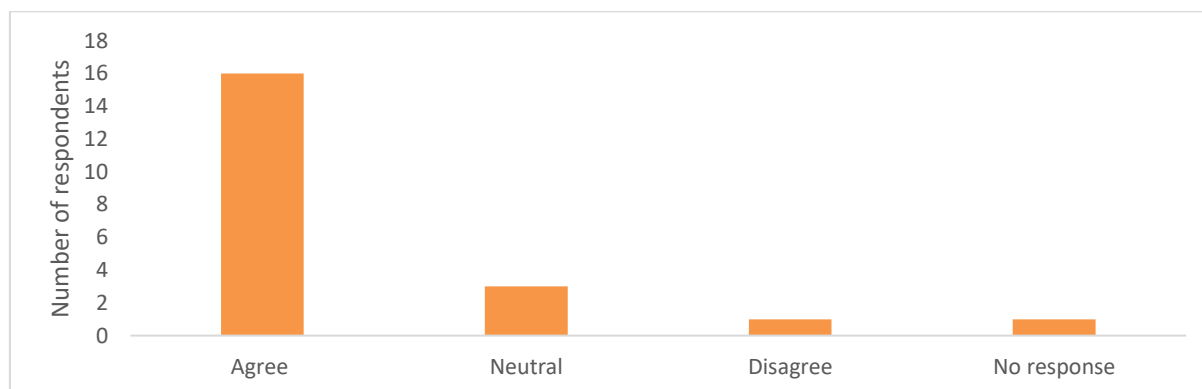
This section outlined stakeholder responses and Ofgem’s decisions to the topics raised in questions 1 through to 3 of the ECO4 Scoring Methodology: Part 2. These questions concern score format, uplifts and determining the finishing SAP band.

Question 1: Do you agree with our proposed format for partial project and full project scores? Please provide reasons for your answer, and if applicable alternative suggestions with justification including as much detail and evidence as possible.

Question 2: Do you agree with our proposal to include fixed value uplifts into our scoring matrix and for fixed value uplifts to be notified as measures? If not, please indicate your preferred alternative.

Question 3: Do you agree with our proposal to require a post-retrofit RdSAP assessment to determine a project’s finishing SAP rating (option 1)? Responses will be considered alongside those received on this topic during part 1 of our scoring consultation

Question 1: Do you agree with our proposed format for partial project and full project scores? Please provide reasons for your answer, and if applicable alternative suggestions with justification including as much detail and evidence as possible.



	Agree	Neutral	Disagree	No response
Number of stakeholders	16	3	1	1
% of stakeholders	80%	15%	5%	

Figure and Table 12: Summary of stakeholder feedback to question 1 of ECO4 scoring consultation methodology part 2

Summary of responses

4.1. Most respondents agreed that an unformatted CSV file would be more accessible for IT systems and was used successfully in ECO3. One stakeholder requested that PPS and FPS are published without deflators and without multiplier uplifts, as it would keep worksheets simple and clear. Another stakeholder would prefer the deflator for PPS (once decided upon) to be incorporated into the matrix.

4.2. A stakeholder questioned the need for negative cost and SAP scores to be included in the file, noting that these negative measure scenarios are unlikely to be installed. They also noted extra spaces in some text that would make it difficult to upload and suggested that both cost scores and SAP scores are limited to one decimal place, and are rounded accordingly.

4.3. Many stakeholders, including those that disagreed with this approach, took this opportunity to comment on the scoring methodology itself rather than the score format, noting that the use of PPS within the scheme and the complexity and administrative burden it would cause. Three stakeholders also commented on the impact of SAP assessment and the determination of the finishing SAP rating on DHS measures and the scores being based on SAP 2012.

Ofgem response

4.4. We note that most respondents agreed with our proposed format for PPS and FPS. We will maintain our proposed formats for both PPS and FPS.

4.5. PPS and FPS will be contained in separate unformatted CSV files. Whilst one stakeholder preferred the publication of deflated PPS, PPS will be published un-deflated.

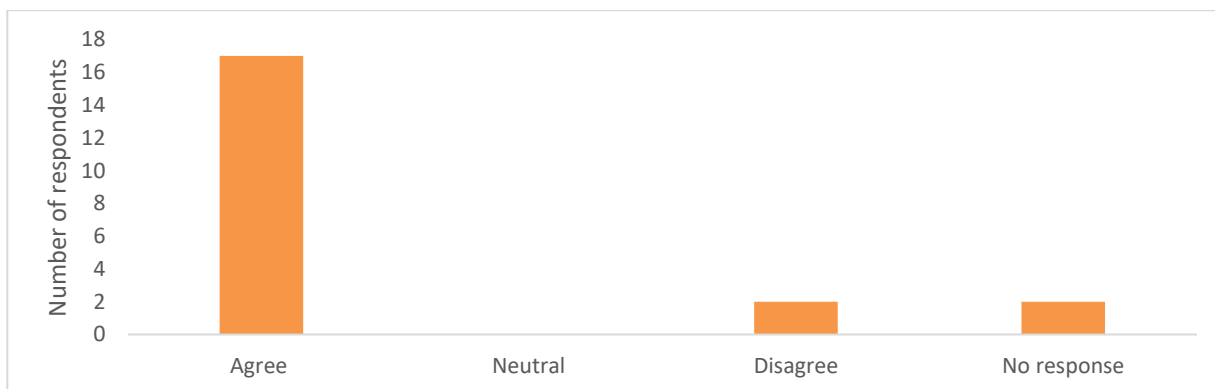
4.6. We acknowledge the concerns of negative cost and SAP scores within the matrix. Measures with negative scores within the matrix will instead have a cost score and a SAP

rating improvement of zero. This approach mirrors the method that has been applied to measures with negative cost scores in the ECO3 deemed scores matrix.

4.7. We also note the concerns on the inclusion of PPS and FPS in ECO4, determining the finishing SAP rating, DHS measures, and PPS methodology. These topics are beyond the scope of this question.

4.8. The inclusion of PPS and FPS in ECO4 is BEIS’s policy intent, and concerns on this matter should be directed to them. We have consulted specifically on determining the finishing SAP rating, DHS measures and the PPS methodology later in this consultation.

Question 2: Do you agree with our proposal to include fixed value uplifts into our scoring matrix and for fixed value uplifts to be notified as measures? If not, please indicate your preferred alternative



	Agree	Neutral	Disagree	No response
Number of stakeholders	17	0	2	2
% of stakeholders	89%	0%	11%	

Figure and Table 13: Summary of stakeholder feedback to question 2 of ECO4 scoring consultation methodology part 2

Summary of responses

4.9. Most stakeholders agreed with our proposal for fixed value uplifts; two stakeholders commented on its simplicity.

4.10. A stakeholder asked for clarification on whether fixed value uplifts would require TrustMark lodgement, as uplifts would not require PAS 2035. Another stakeholder who agreed with the approach noted that fixed value uplifts as measures will cause additional administrative burden across the ECO supply chain.

4.11. Some stakeholders felt that having both fixed value and multiplier uplifts were unnecessarily complex. Two stakeholders noted that uplifts should be consistent with each other (eg all fixed values or all percentages), and another recommended that the term 'uplift' is reserved for multipliers uplifts only (as per ECO3).

4.12. Another stakeholder disagreed with our approach and commented that the consultation and BRE ECO4 Scoring Methodology document do not include any reference to the fixed value uplifts or a methodology for them. The stakeholder noted that without a proper explanation of how the level of a particular fixed uplift has been calculated, it would be difficult to assess how much it mitigates the difference between the broken heating system and the replacement heating system. They explained that different households with broken heating will have different actual in use pre-main heating, which will not be reflected in an RdSAP assessment.

Ofgem response

4.13. We note that most respondents agreed with our proposed approach to include fixed value uplifts within the scoring matrix and to be notified as measures; thus, our decision is to maintain our approach. The broken and replacement boiler/electric storage heater and building fabric repair (formerly referred to as 'hard-to-treat') fixed value uplifts will require Trustmark lodgement.

4.14. In their consultation and Government Response, BEIS specify that broken boiler repairs and replacements will receive a fixed value uplift. BEIS outline in their consultation that repairs and replacements of broken efficient boilers and electric storage heaters would not result in sufficient energy efficiency improvements for them to receive scores based on SAP.

4.15. BEIS outlined in their consultation that the building fabric repair uplift is designed to help overcome barriers of the delivery of measures to the worst performing homes. These homes are more likely to encounter building fabric repair issues, and without an incentive, these homes may be left untreated. BEIS outlined in their consultation that it would not be appropriate to include a fixed building cost within the relevant ECO measure cost assumptions, given the wide-ranging costs associated with rectifying them.

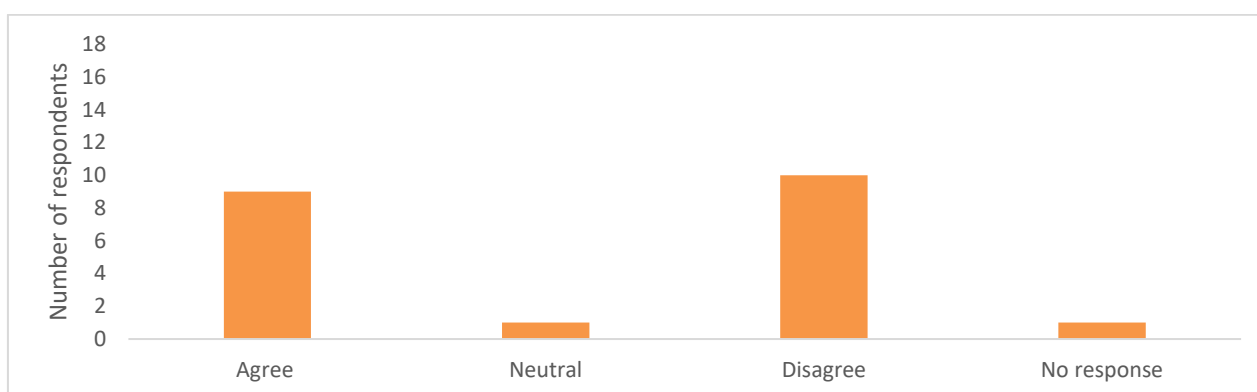
BEIS additionally noted that some building fabric repair issues may not be clearly associated with one measure.

4.16. Given that this uplift may not be associated with a particular measure in a retrofit project, we deem it practical to treat the building fabric repair uplift as a separate measure and is notified as such.

4.17. We understand that some stakeholders have concerns over the complexity of having both fixed value and multiplier uplifts. The inclusion of both type of uplifts in ECO4 and the associated terminology is a policy proposed by BEIS, outlined in their consultation and confirmed in the Government Response. Feedback on this matter should be directed to BEIS.

4.18. The methodology to determine the values of the fixed value uplifts have been calculated by BEIS¹⁰, and as such the methodology does not appear in the BRE methodology document or Ofgem’s scoring consultations.

Question 3: Do you agree with our proposal to require a post-retrofit RdSAP assessment to determine a project’s finishing SAP rating (option 1)? Responses will be considered alongside those received on this topic during part 1 of our scoring consultation.



¹⁰ [Design of the Energy Company Obligation ECO4: 2022-2026](#) – Applying Uplifts, p. 73

	Agree	Neutral	Disagree	No comment
Number of stakeholders	9	1	10	1
% of stakeholders	45%	5%	50%	

Figure and Table 14: Summary of stakeholder feedback to question 3 of ECO4 scoring consultation methodology part 2

4.19. In part 1 of our consultation, we presented two options to determine the finishing SAP rating of a premises. Option 1 requires a post-retrofit SAP/RdSAP assessment, and option 2 calculates the finishing rating based on the measures installed. In part 2 of our consultation, we provided additional detail and discussion of both options.

Summary of responses

4.20. Responses were fairly evenly divided between favouring options 1 and 2. In general, responses from energy suppliers show a preference for option 2, whereas members of the supply chain favour option 1.

Option 1 - post-retrofit SAP/RdSAP assessment

4.21. Stakeholders in support of an RdSAP assessment commented that this aligns with the PAS 2035 framework and could produce an up-to-date EPC for the property. This route was seen by some stakeholders to best complement the overall policy objectives and allow accurate evaluation of the scheme.

4.22. Respondents in favour of the approach requested clarity on whether a post-retrofit RdSAP assessment would need to be lodged as an EPC on the central register.

4.23. Stakeholders outlined two main areas of concern with respect to option 1. The first was around the potential inaccuracy of SAP assessments and misrepresentation. Several responses highlighted the additional cost and resources required to validate scores, citing burdens seen in earlier ECO schemes.

4.24. While stakeholders welcomed the proposed increased scrutiny of RdSAP assessments, presented in part 2 of our consultation, some suppliers still felt that option 1 was open to manipulation and carried risks. They were concerned that SAP inputs could be manipulated and that discrepancies between assessments could result in suppliers losing scores.

4.25. Many of the energy suppliers responding to the consultation argued that the auditing of RdSAP assessments is the responsibility of TrustMark and the accreditation schemes, and that we should aim to avoid duplication in the checks carried out. They expressed concern that they will need to gather supporting evidence and quality-control RdSAP assessments, resulting in an increased administrative burden.

4.26. Stakeholders felt this concern would be reduced if the responsibility for ensuring assessment accuracy sits with TrustMark and the accreditation schemes rather than Ofgem. They are keen that any issues with RdSAP assessments are investigated directly with Retrofit Assessor, rather than suppliers being drawn in. It was acknowledged that scores may need to be revised based on the outcomes of investigations.

4.27. A related point, raised in response to option 1, was whether the RdSAP assessment should be lodged as an EPC on the central register. EPC and PAS accreditation bodies argued for a lodged EPC due to their risk-based smart audit system which could be used target ECO-specific risks. However, other respondents were not in favour of a lodged EPC due to the additional delivery cost and concerns around reliance on the EPC auditing regime.

4.28. The second consideration is the difficulty in ascertaining the viability of a project, as the final improvement and the FPS would be unknown until the project is complete. Some stakeholders noted the difficulty of planning and forecasting a project.

4.29. In response to part 2, three members of the supply chain also highlighted that the savings for district heating system (DHS) measures cannot always be recognised in RdSAP, and that full SAP is more appropriate where a project contains a DHS connection.

Option 2 – calculated finishing SAP rating

4.30. Stakeholders in support of using a calculated SAP rating, option 2, commented on the simplicity, citing the ease of administration. They favoured the increased certainty, as the expected FPS would be known from the start of a project. Stakeholders also viewed this option as being less open to manipulation and gaming.

4.31. They also highlighted that due to planned updates to SAP throughout ECO4, using a calculated approach could result in less confusion when new versions of SAP launch.

4.32. Concerns surrounding this option concentrated on the accuracy of figures, as calculating the finishing SAP rating would use assumed values and ignore real-world data. One respondent highlighted the potential perverse outcomes where the calculated SAP rating differs from a subsequently lodged EPC, suggesting that this could leave BEIS and Ofgem open to challenge.

Ofgem response

4.33. Having considered both options, we have decided to require the use of an RdSAP assessment to determine a property's finishing intermediate SAP band and the full project score.

One of BEIS's key overarching objectives is to upgrade fuel poor homes to energy efficiency rating of band C by 2030 as far as reasonably practicable. The core requirements of the scoring methodology, such as the Minimum Requirement for SAP band improvements, are designed to support this aim. We consider that requiring a post-retrofit RdSAP assessment provides the best assurance that the minimum requirement and BEIS overarching objective has been met. We also consider that this option better aligns with the PAS 2035 framework.

4.34. The primary concern regarding this option, raised in response to both parts of our consultation, was the potential misrepresentation of RdSAP assessments and lack of consistency between pre- and post-retrofit assessments. Suppliers were concerned that this could lead them needing to retain evidence and carry out further checks.

4.35. We are aware that as part of PAS 2035, TrustMark intends to require the lodgement of the underlying data (XML file) for the pre-retrofit and post-retrofit RdSAP assessments. TrustMark will require pre and post RdSAP assessment data for ECO projects for ECO4 projects to be lodged into the TrustMark Data Warehouse. Any discrepancies between pre and post assessments will be flagged for audit. This should reduce the risk of unexplained differences between RdSAP pre and post assessments. PAS Scheme Providers will undertake random audits on a minority of those documents, as is standard for RdSAP assessments lodged within Trustmark's Data Warehouse.

4.36. We will continue to work with TrustMark and BEIS to ensure auditing is robust and transparent, with the aim of achieving sufficient assurance that we and suppliers can rely on data obtained from assessments.

4.37. We understand that respondents were concerned that option 1 would impact project planning, as the FPS would be unknown until the end of the project. However, PAS 2035 allows the improvement in SAP rating to be a key factor in project planning. The assessment of the premises will look at what measures can be installed with a target finishing SAP rating in mind. An Improvement Option Evaluation report will be developed highlighting the different combinations of measures that could achieve the required SAP rating. The most appropriate combination will then be selected in consultation with the homeowner to agree the Medium-Term Improvement Plan which details the measures to be installed

4.38. Some stakeholders felt that calculated scores offered a simpler and more transparent system, that is less open to manipulation. We agree with stakeholders' views that a calculated finishing SAP position may provide additional certainty regarding final scores. However, BEIS's core objective is to improve as many fuel-poor homes to EPC C as is cost-effective and practicable by 2030. If a calculated approach determines the finishing SAP rating, we will not have certainty this objective has been met.

4.39. This is because PPS are based on averages taken across the national housing stock and will not accurately represent actual SAP improvements in each case. We expect this to even out over the scheme, but if delivery favours certain projects, the calculated SAP improvements and actual SAP improvements may no longer match. The result could be properties that are deemed to have met the minimum requirement within ECO, but which in real life do not, risking the delivery of BEIS's core objective.

4.40. We note respondents' concerns regarding the use of RdSAP to score DHS measures. As outlined in the BEIS Government Response, where a project contains only a DHS measure (or a DHS and any other non-PAS measure), a full SAP assessment pre- and post-retrofit should be used to determine the starting and finishing SAP band.

5. ECO4 Scoring Consultation Part 2: Questions 4 -7

Section summary

This section outlines stakeholder responses and Ofgem’s decisions to the topics raised in questions 4 through to 7 of the ECO4 Scoring Methodology: Part 2. These questions concern notification of measures.

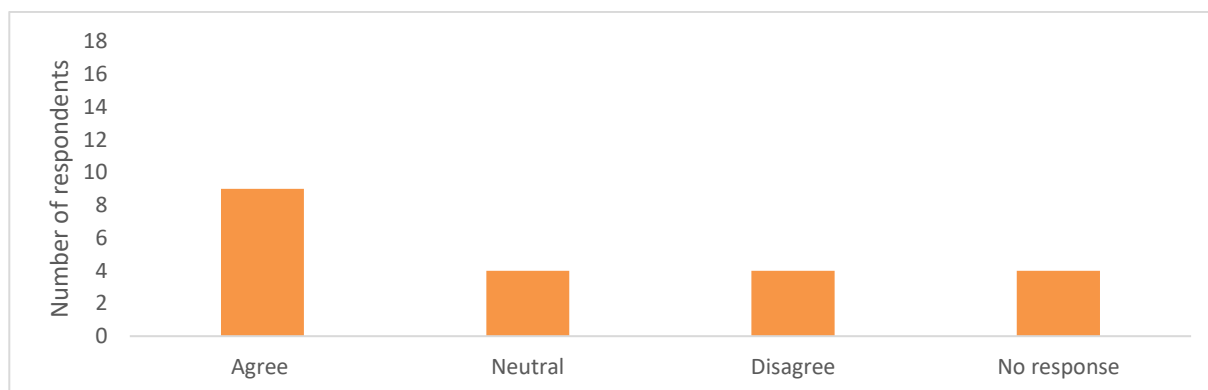
Question 4: Do you agree with separate measure and project notifications? If not, would you prefer a single notification? Please suggest any pros and cons to either approach that have not been included above.

Question 5: Do you agree with our proposal to award deflated PPS to the final measure in a project? If not, please suggest an alternative.

Question 6: Do you agree that in ECO4 we should continue to require supplier generated MRNs to for all measures? If not, please propose any alternative options.

Question 7: Do you agree with our proposals for determining the point of completion for the project? Can you suggest any alternatives to determine that a project has been completed?

Question 4: Do you agree with separate measure and project notifications? If not, would you prefer a single notification? Please suggest any pros and cons to either approach that have not been included above.



	Agree	Neutral	Disagree	No response
Number of stakeholders	9	4	4	4
% of stakeholders	53%	24%	24%	

Figure and Table 15: Summary of stakeholder feedback to question 4 of ECO4 scoring consultation methodology part 2

Summary of responses

5.1. Stakeholders who agreed with the proposal commented that separate measures and project notifications will make the process simple, and aid installers in keeping track and recording their work status.

5.2. One stakeholder noted that, whilst they would view separate measures and project notifications as adding complexity and administrative burden, they acknowledge that separate notifications would allow better data handling. Another stakeholder outlined that separate notifications would resolve issues surrounding residual addresses, as address details would be captured at the project level, and associated evidence would only be required to be submitted once.

5.3. A common point raised by stakeholders that disagreed with the proposed approach was the complexity of separate notifications, with a stakeholder noting that separate project and measure notifications doubles the amount of reporting. There was an overall preference from stakeholders who disagreed, for a single notification template, as it would be easier to administer.

5.4. A stakeholder suggested that suppliers could populate or leave submission fields blank depending on where within a project an installed measure falls. Another explained that a single notification template would have minimal system development requirements. They also suggested that obsolete fields required for previous schemes are removed to aid processing speed.

Ofgem response

5.5. With consideration to all stakeholder responses, our decision is to have separate measure and project notifications.

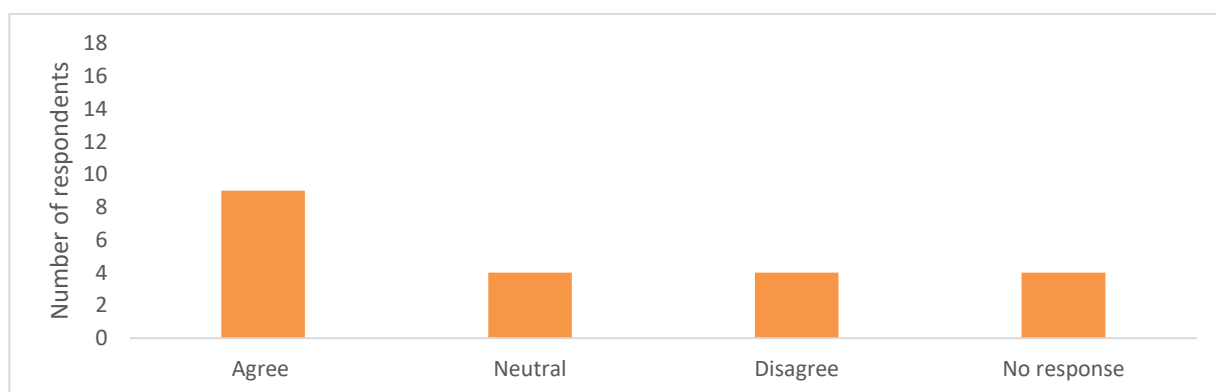
5.6. Separate notifications will better accommodate BEIS’s proposals of awarding PPS as each measure is approved and awarding FPS once the entire package is approved. It will also mirror the sequential approach of the retrofit project and the evidence collected by the Retrofit Co-ordinator and installer, and will also allow suppliers to view projects separately on the ECO register. This will provide greater clarity around project status and details.

5.7. We acknowledge that a single notification template could be easier to notify, however we view that the benefits of separate measure and project notifications far outweigh its increased administrative aspects.

5.8. Most project level data would be notified at the beginning of the project and the remaining project data would be notified at the end of the project. This would remove the need to notify redundant information and the risk of mismatches, which are drawbacks of using a single notification template.

5.9. Two notification templates would have fewer fields compared to a single template, resulting in faster checks and improved register performance. Obsolete fields required for previous schemes will also be removed.

Question 5: Do you agree with our proposal to award deflated PPS to the final measure in a project? If not, please suggest an alternative



	Agree	Neutral	Disagree	No response
Number of stakeholders	9	4	4	4
% of stakeholders	53%	24%	24%	

Figure and Table 16: Summary of stakeholder feedback to question 5 of the ECO4 scoring consultation methodology part 2

Summary of responses

5.10. Of those who responded, the majority agreed with the proposal. Those who agreed stated that awarding PPS to all measures would keep administration and record keeping as simple as possible, and that it was necessary to have a PPS in cases where a project did not meet the minimum requirement.

5.11. Those who disagreed felt that awarding PPS to the final measure would not be needed if measures in the project had final dates notified. Another thought it would allow suppliers to only pay installers for part of their work.

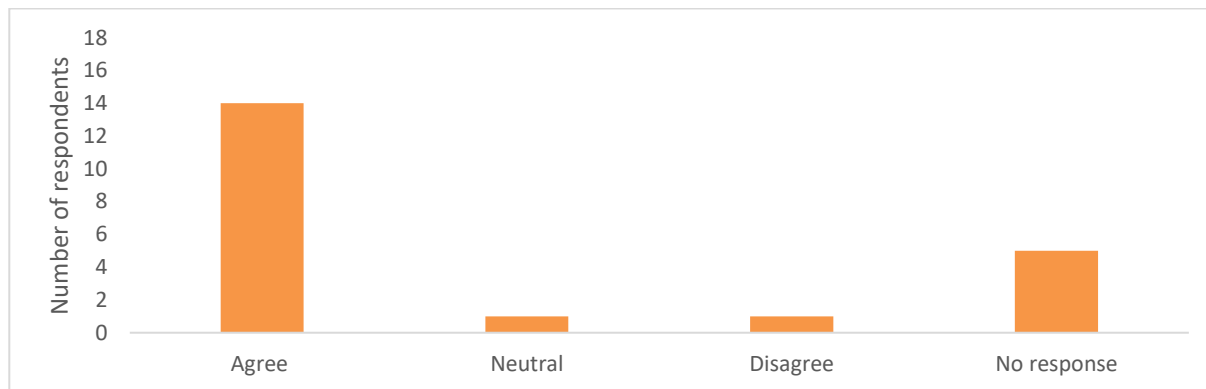
Ofgem response

5.12. The majority of stakeholders who responded to this question agreed with our approach, and we have decided to award a deflated PPS to the final measure in a project.

5.13. We acknowledge that it would be possible to include final dates to measures notified, however there is no guarantee that FPS will be awarded shortly after the final measure has been awarded PPS. It is possible that the final measure installed may not be the last one to be notified to Ofgem, and it may not be the last one to be approved.

5.14. There may also be instances where a project has its FPS later revoked or is never awarded a FPS (eg where a measure is rejected, or the project does not meet the minimum requirement). In these scenarios, deflated PPS will be the final score for each measure, and there would be the need for PPS to be applied to the final measure in the project.

Question 6: Do you agree that in ECO4 we should continue to require supplier generated measure reference numbers to for all measures? If not, please propose any alternative options.



	Agree	Neutral	Disagree	No response
Number of stakeholders	14	1	1	5
% of stakeholders	88%	6%	6%	

Figure and Table 17: Summary of stakeholder feedback to question 6 of the ECO4 scoring consultation methodology part 2

Summary of responses

5.15. Common reasons given by those who agreed were that a supplier generated measure reference number (MRN) was required for non-Trustmark measures like DHS, and that an MRN would not change if the lodgement was to be updated. It was noted that suppliers will have this system set up for internal use already.

5.16. A stakeholder who disagreed expressed a preference for using a Trustmark number but did not provide a reason for doing so.

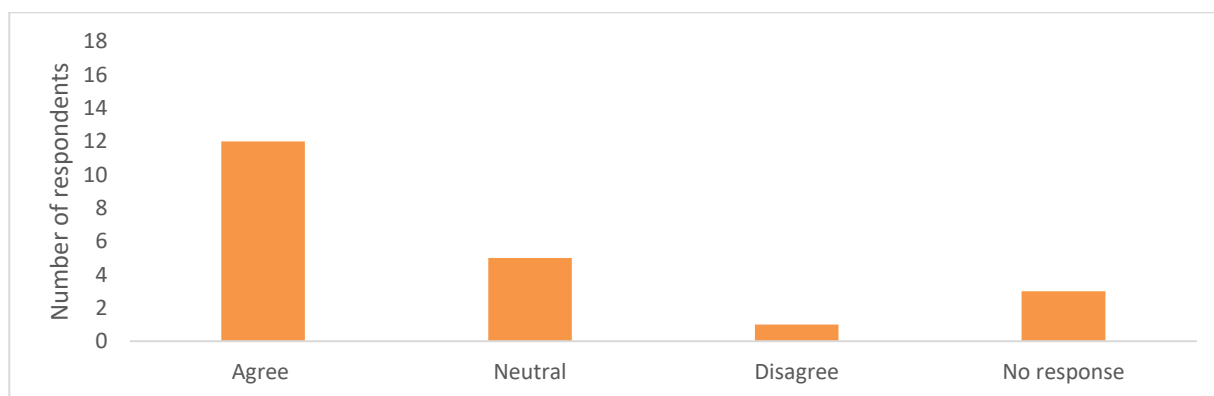
Ofgem response

5.17. As almost all stakeholders agreed with our approach and no alternative options were suggested, we do not see a cause to deviate from the requirement of supplier generated MRNs to be provided for all measures.

5.18. As some stakeholders reiterated, measures not lodged with Trustmark (eg DHS measures), would require their own reference number, and having separate systems for different measure types could cause confusion.

5.19. A measure identifier that contains the supplier prefix would aid in identifying the owner of the measure and in turn assist the measure transfer process.

Question 7: Do you agree with our proposals for determining the point of completion for the project? Can you suggest any alternatives to determine that a project has been completed?



	Agree	Neutral	Disagree	No response
Number of stakeholders	12	5	1	3
% of stakeholders	67%	28%	6%	

Figure and Table 18: Summary of stakeholder feedback to question 7 of the ECO4 scoring consultation methodology part 2

Summary of responses

5.20. Most stakeholders agreed with the proposal but did not give any reasoning. The stakeholder who disagreed stated that they did not want further reliance on Trustmark.

5.21. One stakeholder suggested that, where we only have one template, the date of completed installation (DOCI) of the final measure in the project can be used as the date of project completion.

Ofgem response

5.22. Almost all respondents agreed with both our options for determining the point of completion, which were dependent on either the use of separate measure and project notifications or a singular notification. Thus, our approach to determining the point of completion for both options remain unchanged.

5.23. We requested stakeholder feedback on project notifications in question 4 of the second part of our consultation, and we confirmed in our response to this question that there would be separate measure and project notifications. In this case, determining the point of completion would be through notifying the post-retrofit project data in the second project notification submitted after project completion.

5.24. We appreciate the suggestion that the use of the DOCI of the final measure in the project where one template exists. However, this suggestion cannot work as the project notification, as two notification templates are required. Therefore, our final decision is to maintain the two notification templates approach.

6. ECO4 Scoring Consultation Part 2: Questions 8 -16

Section summary

This section outlines stakeholder responses and Ofgem’s decisions to the topics raised in questions 8 through to 16 of the ECO4 Scoring Methodology: Part 2. These questions concern proposed changes to current measure types within the scheme.

Question 8: Do you agree with the assumptions used to develop the partial project scores? If not, please suggest where the assumptions should be changed.

Question 9: What are your views on our proposal to remove the wall type distinction for heating measures?

Question 10: Do you agree with our proposal to split the standard heating control measure into a programmer and room thermostat measure and a TRV measure?

Question 11: Do you have any suggestions on how heating control measure category could be further simplified?

Question 12: Do you agree with the proposed changes to the notification of rare heating systems? If not, please provide alternative suggestions.

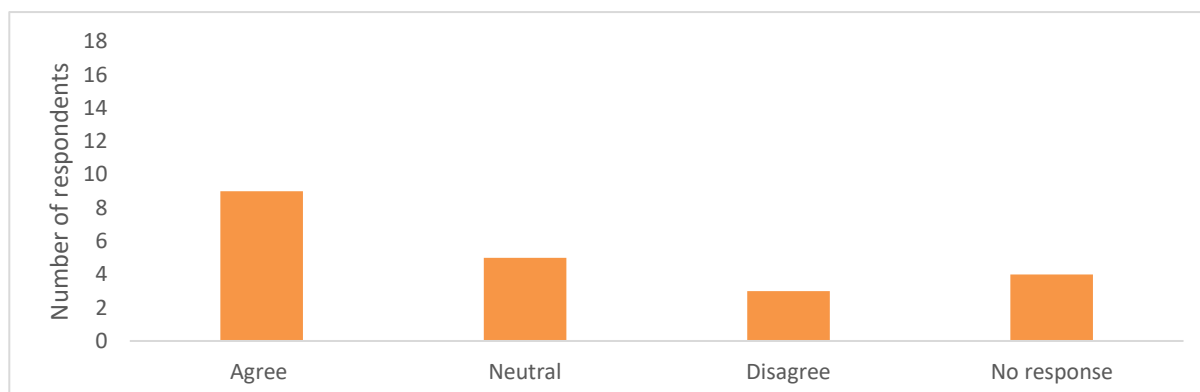
Question 13: What are your views on our proposal to remove pre-main heat source for insulation measures?

Question 14: Do you agree that the number of u-value variants for solid wall insulation measures should be reduced? If not, please provide alternative suggestions.

Question 15: What are your views on our proposal to have a combined park home insulation measure?

Question 16: Do you agree with our proposal to retain the distinction between single and double park homes by creating a “PHI single” and “PHI double” measure?

Question 8: Do you agree with the assumptions used to develop the partial project scores? If not, please suggest where the assumptions should be changed.



	Agree	Neutral	Disagree	No response
Number of stakeholders	9	5	3	4
% of stakeholders	59%	29%	18%	

Figure and Table 19: Summary of stakeholder feedback to question 8 of the ECO4 scoring consultation methodology part 2

Summary of responses

- 6.1. Most stakeholders agreed with the proposal and did not give any reasoning.
- 6.2. One stakeholder acknowledged that for PPS, heating and fabric measures will need to be in line with the PAS2035 retrofit design and Medium-Term Improvement Plan (MTIP).
- 6.3. A common theme that arose with stakeholders who did not agree with the assumptions is the calculation of the PPS scores using SAP 2012. Several were of the view that the SAP 2012 fuel tariffs are out of date and questioned whether their use aligns with the overall aim of ECO4 and a net zero goal. One stakeholder suggested that the continuing use of SAP 2012-based PPS following the introduction of SAP 10 for assessments could cause confusion and mistakes in delivery, and that this could put installers in breach of contract.
- 6.4. One stakeholder expressed concerns about the use of a single property archetype to generate PPS for each floor area band. They suggested that this approach may not

adequately represent the range of homes found in each band, as dimensions of the walls, roofs, and windows relative to each other or relative to the total floor area will vary from home to home. They were of the view that this could create anomalies, where certain property types will receive lower PPS than they would have done, if the property mix used to develop the scores was more representative.

Ofgem response

6.5. Given that most stakeholders agreed with the assumptions to develop the partial project score, our decision is to proceed on the basis of these assumptions.

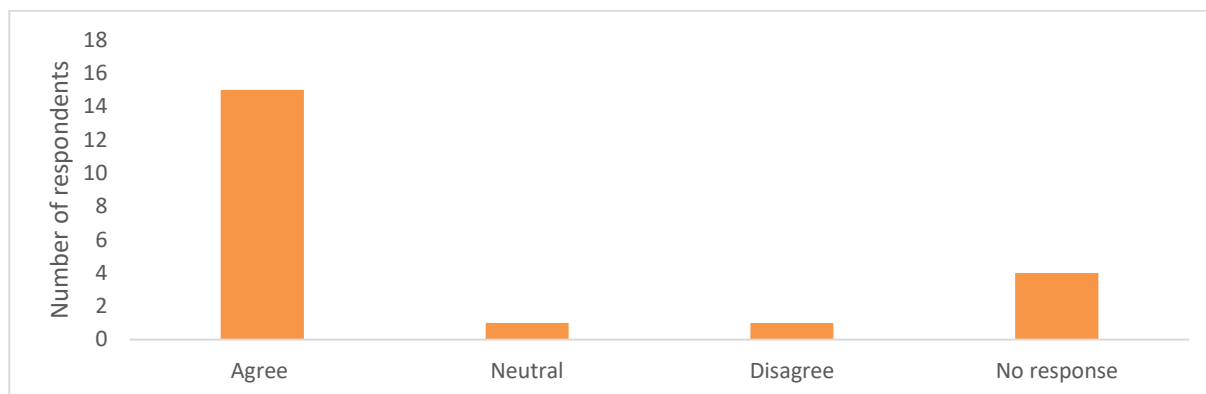
6.6. We note that the primary concern surrounds the calculation of scores using SAP 2012. The next iteration, SAP 10, is due to be launched in 2022. A complete edition of SAP 10 (SAP 10.2) was published in February 2022¹¹, and is expected adopted for Building Regulations purposes in England from June 2022. It is expected that an updated version of the Reduced Data Standard Assessment Procedure (RdSAP) will be used around six months after the adoption of SAP 10. It is not possible to develop scores using SAP 10 currently, as the calculation engine was not complete.

6.7. BEIS have confirmed that ECO4 legislation will require the scoring methodology to be based on the current version of the SAP (SAP 2012). The scores published alongside this consultation have been developed accordingly. The FPS and PPS deemed scores will remain based on SAP 2012 throughout the scheme unless legislation is changed to require an update to the scores.

6.8. A stakeholder expressed concerns that the modelled BRE archetypes do not include properties with extra wall area, or with more roof area to floor area, such as found in a bungalow. BRE have advised that SAP models will take into account the additional wall or roof area when an EPC is created. If there is a property with significantly higher heat losses due to extra walls or more roof area, then it is highly likely that the property will be in a lower EPC band than a similar property with less external area. Furthermore, if they were in the same SAP band, the SAP calculation would then show that the difference caused by the different property archetypes is not significant.

¹¹ [Standard Assessment Procedure \(SAP 10\)](#)

Question 9: What are your views on our proposal to remove the wall type distinction for heating measures?



	Agree	Neutral	Disagree	No response
Number of stakeholders	15	1	1	4
% of stakeholders	88%	6%	6%	

Figure and Table 20: Summary of stakeholder feedback to question 9 of the ECO4 scoring consultation methodology part 2

Summary of responses

6.9. A large majority of stakeholders agreed with our approach. Stakeholders noted that wall construction type is one of the inputs in the initial Retrofit Assessment, and therefore would be readily factored into determining the starting SAP rating of the property.

6.10. Another stakeholder commented that the removal of this distinction reduces the ability for score manipulation and that the proposed approach should also reduce the chance of genuine administrative errors.

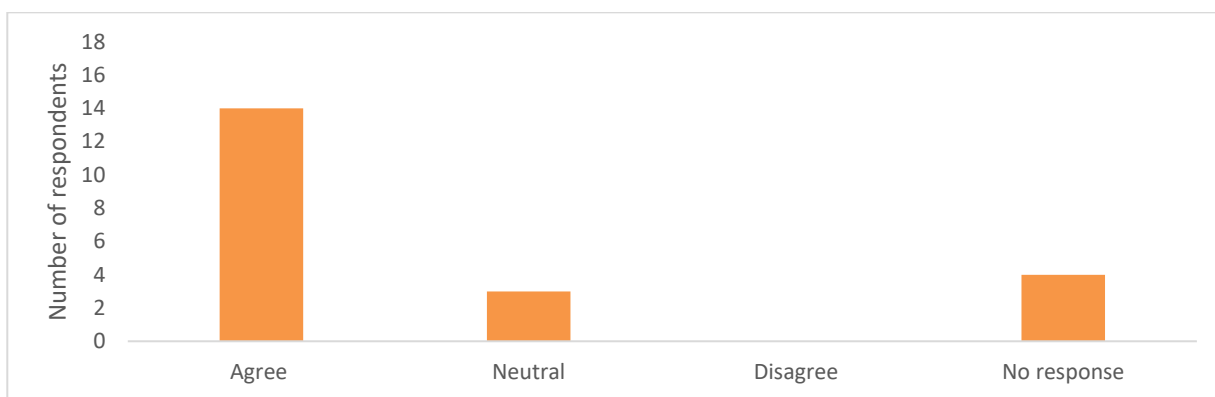
6.11. A stakeholder who disagreed commented that although the wall type will be reflected in the starting intermediate SAP band, the band reflects other factors, and the subsequent performance of new heating is affected by the wall type. Given the importance of wall types and insulation (or lack thereof) they view it unusual to remove the distinction from heating measures.

Ofgem response

6.12. We will retain our proposed approach and remove the wall type distinction for heating measures.

6.13. We acknowledge that the starting intermediate SAP band reflects factors other than wall type. However, the cost score is also influenced by a number of other factors. We believe that removing the wall type for heating measures in ECO4 will result to less fraudulent activities around projects.

Question 10: Do you agree with our proposal to split the standard heating control measure into a programmer and room thermostat measure and a TRV measure?



	Agree	Neutral	Disagree	No response
Number of stakeholders	14	3	0	4
% of stakeholders	82%	18%	0%	

Figure and Table 21: Summary of stakeholder feedback to question 10 of the ECO4 scoring consultation methodology part 2

Summary of responses

6.14. No stakeholders disagreed with our proposal. Many stakeholders welcomed the simplicity of the approach compared to the notification method in ECO3.

6.15. A stakeholder noted the similarity between “preHC” boiler scores and “noPreHC” boiler scores once heating controls are added. They suggested that for a heating upgrade, one score covering both scenarios would be sufficient, with the assumption that

a full set of heating controls would always be fitted if not already present. The same stakeholder suggested that the SAP savings of the individual elements of the heating control measure can vary and proposed splitting out the timer from the room thermostat.

6.16. One stakeholder disagreed with the proposal to remove 'smarttherm_noP&RT', noting that the removal of this measure ultimately detracts from the simplification of heating controls.

6.17. Another stakeholder requested that a table equivalent to Table 24¹² of the ECO3 Guidance: Delivery could be included in the ECO4 guidance, to ensure complete clarity for both suppliers and the supply chain on which score to claim based on the combination of heating controls present or installed.

Ofgem response

6.18. Stakeholders who agreed with our approach welcomed the simplicity compared to the notification method in ECO3. Thus, our decision is to split the standard heating control measure.

6.19. Throughout ECO, the heating control measure category has grown and the rules for combining heating controls have become more complex. These changes reduce the number of score variations and ensures better standardisation across the heating controls measures.

6.20. Whilst there may have been an opportunity in ECO3 to combine the "preHC" and "noPreHC" versions of boiler scores, we do not consider the opportunity remains in ECO4, as we have split the heating controls measure type into programmer and room thermostat and TRV elements. Whilst the new programmer and room thermostat measure type still combines two elements, we believe this strikes a balance between granularity and simplicity.

6.21. We note the disagreement with our approach to remove the 'smarttherm_noP&RT'. In scenarios where a property without an existing programmer

¹² [ECO3 Guidance: Delivery](#): Table 24 in the ECO3 guidance contains the appropriate scores that can be claimed alongside the relevant boiler score where heating controls are not present and functioning prior to installation.

and room thermostat receives a smart thermostat, both the 'smarttherm' and 'p&RT' scores can be claimed.

Question 11: Do you have any suggestions on how heating control measure category could be further simplified?

Summary of responses

6.22. Around half of stakeholders provided suggestions. A common point provided by almost half of the responding stakeholders is that with the proposal in BEIS's consultation for Boiler Plus to be applied to all ECO4 boiler installations throughout Great Britain, it would be the ideal opportunity for compensation controls to be absorbed back into boiler scores. One stakeholder additionally suggested the provision of clear guidance on "broken" heating controls is required for ECO4.

6.23. One stakeholder suggested that if delivering a heating measure, the installation of heating controls should be mandatory and the PPS for the main heating measure would also incorporate the cost savings for heating controls. They explained that this would reduce administrative burden for both Ofgem and suppliers.

6.24. Another stakeholder was of the view that the only way to simplify the measure category would be to have a specific measure type for each pre- and post-installation combination. A final suggestion to simply the measure category is reporting TRVs as separate measures.

Ofgem response

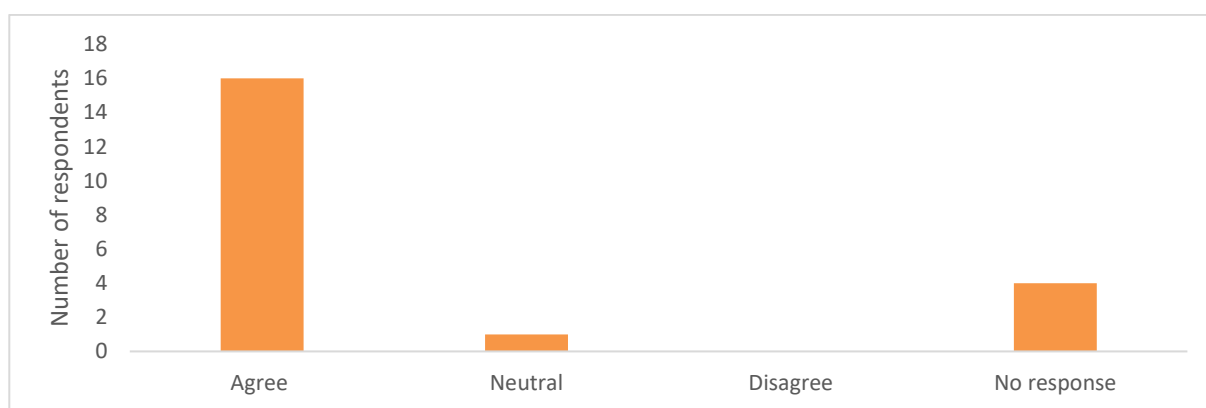
6.25. In ECO3, compensation measures savings were separated from boiler scores as compensation measures are optional, not compulsory. Boiler installations must include either weather compensation, load compensation, flue gas heat recovery, or a smart thermostat. Due to this we consider it is appropriate that they remain a distinct measure type. We further note that in the Government Response to their ECO4 consultation, BEIS have decided not to take forward their proposal to make the English Boiler Plus standard a specific ECO requirement throughout Great Britain. ECO4 installations will instead follow the relevant requirements set out in building regulations for each nation when they come into effect.

6.26. We note the suggestion of specific measure type for each pre- and post-installation combination. However, creating a cost score for each combination would

result in a large number of individual scores, and not all combinations would be used frequently.

6.27. The increase in the number of scores would significantly enlarge the number of total scores within the PPS matrix and would add complexity. A collection of similar scores in the matrix could cause confusion and result in the selection of an incorrect score.

Question 12: Do you agree with the proposed changes to the notification of rare heating systems? If not, please provide alternative suggestions.



	Agree	Neutral	Disagree	No response
Number of stakeholders	16	1	0	4
% of stakeholders	94%	6%	0%	

Figure and Table 22: Summary of stakeholder feedback to question 12 of the ECO4 scoring consultation methodology part 2

Summary of responses

6.28. Most stakeholders who responded to the above question agreed with our proposal and had no strong views. They highlighted and welcomed the simplicity of the approach to administer rare heating systems.

6.29. One of the stakeholders who agreed highlighted that the approach will more accurately reflect the pre-installation heating system type and will be easier for Ofgem

to verify. Another stakeholder who agreed said that they would require visibility of the criteria to incorporate into their IT systems.

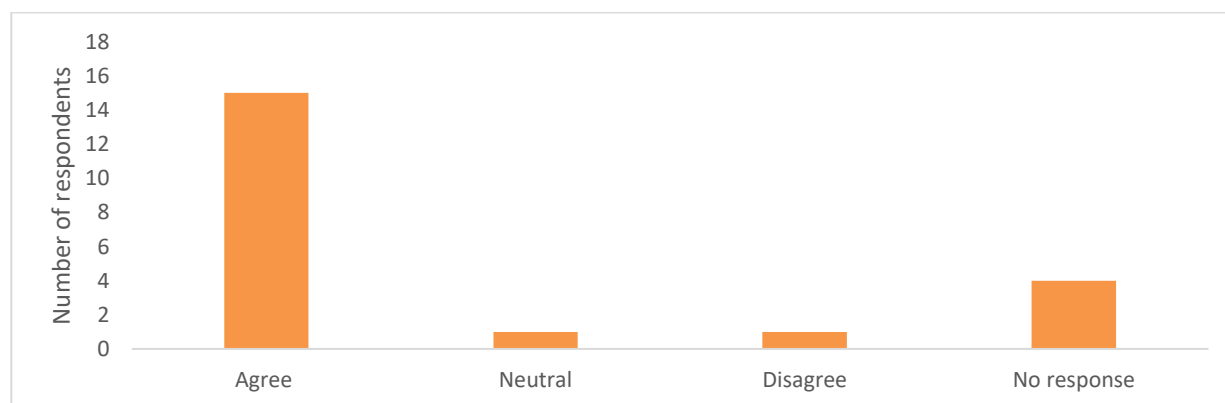
6.30. One stakeholder who also agreed suggested we should consider adding air source heat pumps (ASHP), as any installed prior to 2010 would start to come to the end of their life.

Ofgem response

6.31. Most respondents agreed with our proposal and welcomed the simplicity of the approach to administer rare heating systems. Therefore, we intend to implement the proposed changes to the notification of rare heating systems for ECO4.

6.32. We acknowledge the point concerning the addition of ASHP. ASHP is currently included as a rare heating type within the ECO3 proxy table. It will also be included in the ECO4 proxy table as a pre main heat source for any heating measure that is not a heating control measure. ASHP is currently included as a post main heat source in the PPS matrix.

Question 13: What are your views on our proposal to remove pre-main heat source for insulation measures?



	Agree	Neutral	Disagree	No response
Number of stakeholders	15	1	1	4
% of stakeholders	94%	6%	0%	

Figure and Table 23: Summary of stakeholder feedback to question 13 of the ECO4 scoring consultation methodology part 2

Summary of responses

6.33. Most stakeholders who responded to the above question agreed with our proposal. Some of them noted that our approach to remove pre-main heating sources for insulation measures will minimise the falsification of pre-main heating sources that accounts for fraud cases in ECO3.

6.34. A few of stakeholders who agree commented that the project scores will be based on pre- and post-project SAP bands and SAP takes into consideration the heating source. They believe that this will be beneficial, minimising gaming and encouraging the push to attain the FPS, rather than profiteering on a high PPS for an off-gas insulation measure.

6.35. Another supplier felt that as the PPS are derived using a weighted mix of heating systems for dwellings in each SAP band in the national stock, it would be more appropriate to say the impact of the heating system on insulation measures' PPS is included indirectly.

6.36. One stakeholder disagreed, expressing that where the heating system in a property is broken, the heating source currently replacing the broken heating system should be represented, otherwise the resultant score would unnecessarily and inaccurately drag down the annual bill savings. They also added that even where a pre-main heating source is accurate, it seems unusual to discard such readily available information in scoring insulation measures.

6.37. One respondent felt that there was no justification for operating two different scoring systems, and such distinction for the PPS is inappropriate if it would be superseded by FPS. Concern around two scoring systems is beyond the scope of this question. It has additionally been raised and addressed above in the response to question 1 of the second part of our consultation .

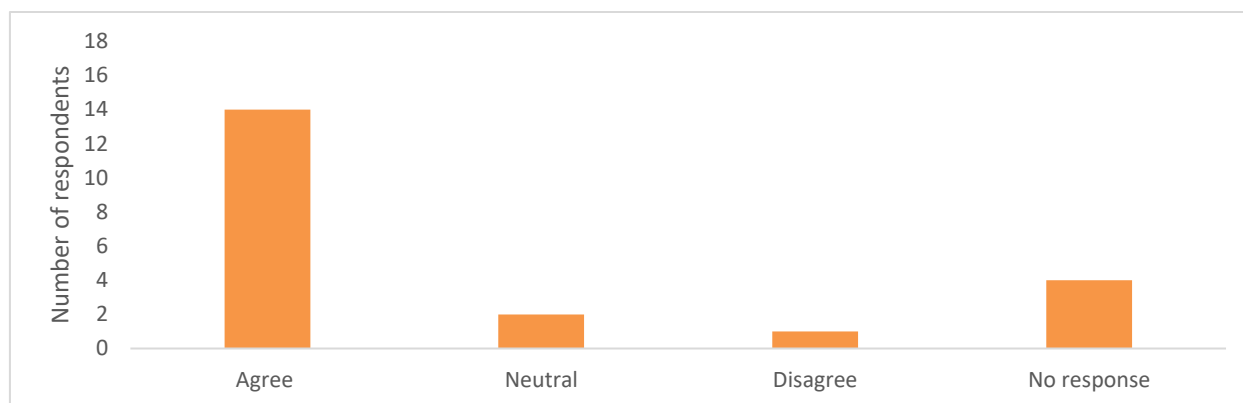
Ofgem response

6.38. Most stakeholders agreed with our approach, and our decision is to remove the pre-main heat source for insulation measures.

6.39. We note the concern that where the heating system in a property is broken, the heating source currently replacing the broken heating system should be represented. However, the savings for insulation measures are derived using a weighted mix of

heating systems for dwellings in each intermediate SAP band, which would consider the current functioning heating system in the premises.

Question 14: Do you agree that the number of u-value variants for solid wall insulation measures should be reduced? If not, please provide alternative suggestions.



	Agree	Neutral	Disagree	No response
Number of stakeholders	14	2	1	4
% of stakeholders	82%	12%	6%	

Figure and Table 24: Summary of stakeholder feedback to question 14 of the ECO4 scoring consultation methodology part 2

Summary of responses

6.40. Most stakeholders agreed with our proposal to reduce the u-value variants for solid wall insulation (SWI) measures. Some highlighted that the reduction in the number of the variants will align with both the current and proposed future regulations. They also noted that this approach is based on building regulations and installation best practice.

6.41. A few respondents who agreed with our proposal highlighted that it would simplify the scores as many of the u-value variants are not used. One respondent proposed that values could be further reduced by setting a minimum post installation u-value of 0.3.

6.42. One supplier commented that some of the suggestions do not comply with the building regulations, but further information was not presented around this topic.

6.43. A stakeholder who agreed with our proposal suggested this calculated approach be adopted for FPS, rather than SAP assessments, as this would better incentivise higher performing products. As RdSAP relies heavily on assumed u-values, based on age, construction type, thickness, etc, and does not account for a specific insulation product used, assessments will be largely based on default u-values rather than actual values. With this being the case, it would have minimal impact having a more accurate range of EWI partial scores, if this is not represented in the FPS.

6.44. An alternative would be to have additional processes to amend default u-values in RdSAP assessments, such as allowing u-value calculations, however the respondent noted these would add cost, complexity and the risk of gaming, and were the subject of an Ofgem audit in ECO2. Another stakeholder was in favour of bespoke u-value calculations, though noted these should be done so in accordance with correct u-value conventions and carried out by a suitably qualified and competent person¹³.

6.45. One stakeholder noted that the upcoming building regulations update should be taken into account prior to publishing.

6.46. One stakeholder did not agree with our proposal, they commented that SWI properties treated under ECO4 is expected to be different to ECO3 delivery guidance. They mentioned that reducing the number of variants gives less options to installers. Their suggestion was to retain the variants for SWI unless contrary to building regs.

Ofgem response

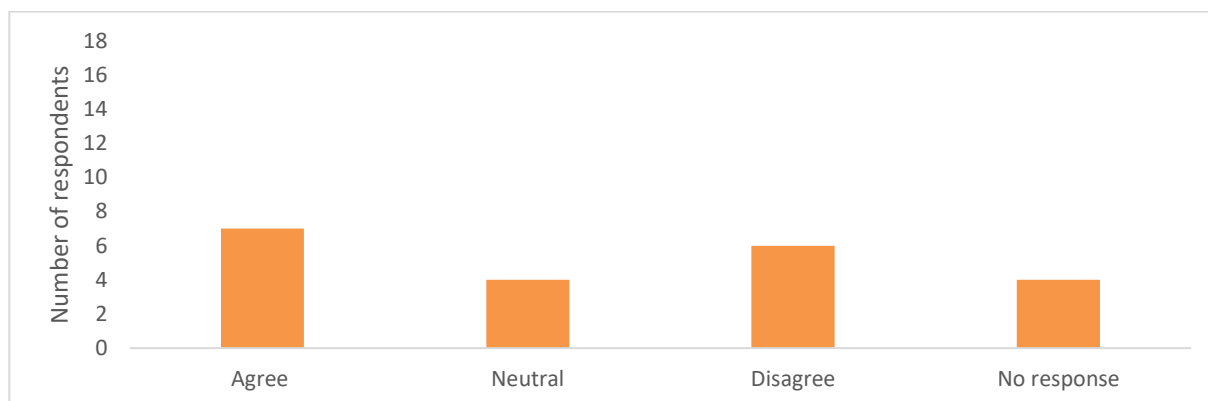
6.47. We considered all stakeholder responses, and our decision is to move forward with our approach to reduce the number of u-values for SWI measures.

6.48. We will not take forward the suggestion to require a maximum post-installation U-Value of 0.3. This is because building regulations allow higher U-values where target values are not technically or functionally feasible or cost effective.

¹³ Example competent routes given were On Construction Domestic Energy Assessor (OCDEA) and Non-Domestic Energy Assessment Certification (NDEA) level 4.

6.49. We acknowledge the suggestion that bespoke u-values used should be done so in accordance with correct u-values conventions, and that this approach could be adopted for FPS. We will address these suggestions in our upcoming administrative consultation.

Question 15: What are your views on our proposal to have a combined park home insulation measure?



	Agree	Neutral	Disagree	No response
Number of stakeholders	7	4	6	4
% of stakeholder	41%	24%	35%	

Figure and Table 25: Summary of stakeholder feedback to question 15 of the ECO4 scoring consultation methodology part 2

Summary of responses

6.50. Stakeholders were divided on this topic. Those who agreed to our proposal to have a combined park home insulation measure welcomed our approach and its alignment with the park home insulation PAS 2030 annex and believe it is best practice. Stakeholders also noted that the upcoming BEIS best practice guide for park home insulation will provide further clarity to the whole supply chain.

6.51. However, almost half of respondents disagreed with our proposal. Stakeholders in favour of maintaining the distinctions between walls, floor, and roof of a park home highlighted technical concerns and the risk of damage to the property when the insulation is installed where it is not recommended.

6.52. Several stakeholders expressed the view that it is sometimes preferable to treat only one or two elements of a park home, where technical and safety considerations can

mean an element of a park home is not suitable for insulation. They also noted that there would be situations where elements of the park home are already insulated. Respondents felt that maintaining the individual scores would ensure that only the insulation deemed necessary by the Retrofit Co-ordinator and System Designer would be installed.

6.53. A stakeholder who agreed with our proposal raised the need further guidance on what constitutes a park home in ECO4, as there has been confusion in ECO3 on when a property should be considered a solid wall bungalow or a park home. They suggest that the terminology relating to park and mobile homes throughout the ECO4 guidance is limited to a single consistent term to avoid confusion.

Ofgem response

6.54. We understand that there is uncertainty within industry on whether the insulation of individual park home elements is currently possible within the PAS 2035 and TrustMark framework.

6.55. TrustMark have advised that guarantee providers may currently require park home insulation to be installed as part of a system for the provision of suitable guarantees. In this case, it would be preferable to have a combined measure containing all elements.

6.56. However, we anticipate that the BEIS best practice guidance will provide further clarity on the insulation of individual park home elements within PAS 2030/2035 and associated guarantees.

6.57. In anticipation of the upcoming BEIS guidance, we have decided to postpone our decision until further information on the guidance is available.

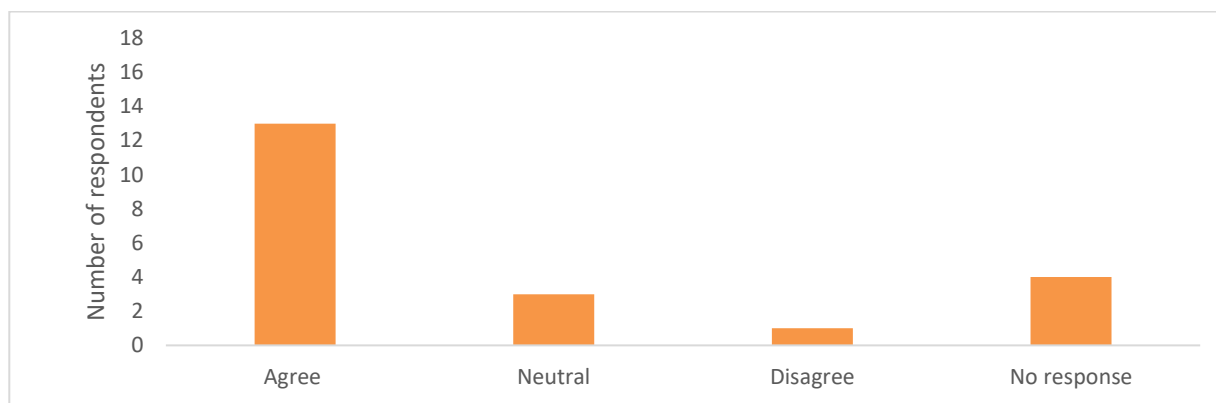
6.58. BEIS have outlined in their Government Response that a new ECO3 interim delivery period¹⁴ will be introduced to support the supply chain during gap between ECO3 and ECO4 schemes.

¹⁴ Further information on ECO3 interim delivery can be found in the [ECO4: 2022 to 2026 – government response](#) – ECO3 Interim Delivery: p. 17

6.59. The interim delivery period will allow suppliers to continue deliver measures to ECO3 rules from 1 April 2022 to 30 June 2022, with some exceptions. ECO3 PHI measures can be delivered during this period and will receive an ECO3 score. This score will then be converted from Lifetime Bill Savings into Annual Bill Savings.

6.60. We intend to publish ECO4 PPS for park home insulation before the end of the interim period. This means that the insulation of park homes will continue to be supported by ECO throughout.

Question 16: Do you agree with our proposal to retain the distinction between single and double park homes by creating a “PHI single” and “PHI double” measure?



	Agree	Neutral	Disagree	No response
Number of stakeholders	13	3	1	4
% of stakeholders	41%	24%	35%	

Figure and Table 26: Summary of stakeholder feedback to question 16 of the ECO4 scoring consultation methodology part 2

Summary of responses

6.61. The majority of stakeholders agreed to our proposal to retain the distinction between single and double park homes.

6.62. A stakeholder who agreed with our proposal to retain the separate measures noted that combining the two measures would also be mitigated by the requirements of SAP assessments.

6.63. Another stakeholder expressed that as both archetypes are likely to fall into the lowest floor segment scoring bracket, having differing PPS may incentivise the delivery of one measure over the other.

6.64. One supplier who disagreed with our approach suggested that having a distinction between single and double park homes is disproportionate to delivery as they expect to receive very few park homes projects.

Ofgem response

6.65. We note the concern that both PHI archetypes are likely to fall into the lowest floor segment scoring bracket. This is due to the average size of a single and double park home.

6.66. We also understand that the separate distinctions, between single and double homes, could be disproportionate to delivery as the number of park home projects is likely to be low.

6.67. As covered in response to question 15, in anticipation of the upcoming BEIS guidance, we have decided on the to postpone our decision until further information is available. In the meantime, suppliers are able to deliver PHI measures using ECO3 rules through the ECO3 interim delivery period.

7. ECO4 Scoring Consultation Part 2: Questions 17 - 19

Section summary

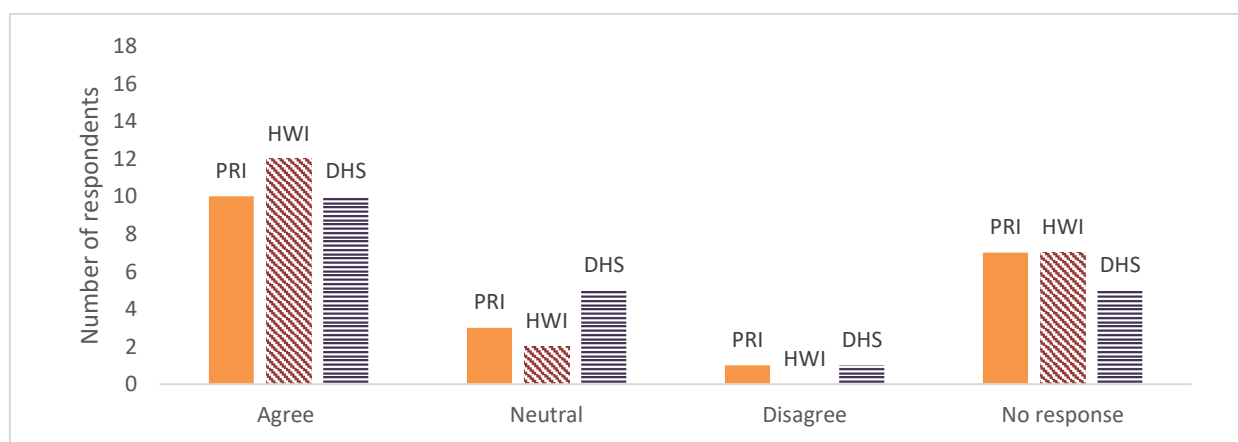
This section outlines stakeholder responses and Ofgem’s decisions to the topics raised in questions 17 through to 19 of the ECO4 Scoring Methodology: Part 2. These questions concern proposed new measure types within the scheme.

Question 17: What are your views on the addition of partial project scores for pitched roof insulation, hybrid wall insulation and district heating system connection measures?

Question 18: Do you agree with the approach and assumptions used to derive the scores for the pitched roof insulation measure? If not, please provide alternative suggestions.

Question 19: Do you agree with the approach and assumptions used to derive the scores for the district heating system connection measure? If not, please provide alternative suggestions

Question 17: What are your views on the addition of partial project scores for pitched roof insulation, hybrid wall insulation and district heating system connection measures?



Pitched roof insulation (PRI)

	Agree	Neutral	Disagree	No response
Number of stakeholders	10	3	1	7
% of stakeholders	71%	21%	7%	

Hybrid wall insulation (HWI)

	Agree	Neutral	Disagree	No response
Number of stakeholders	12	2	0	7
% of stakeholders	86%	14%	0%	

District heating system (DHS)

	Agree	Neutral	Disagree	No response
Number of stakeholders	10	5	1	5
% of stakeholders	63%	31%	6%	

Figure and Table 27: Summary of stakeholder feedback to question 17 of the ECO4 scoring consultation methodology part 2

Summary of responses

7.1. Respondents were in broad agreement with our proposals. Generally, they supported greater alignment with PAS 2035 and Trustmark, and the consistency of the proposals with existing measures.

7.2. Three respondents requested that clear guidance is provided on the use of these measure types prior to their introduction. They referred to issues with the introduction of new measures in the past. One stakeholder expressed concern around the introduction of the pitched roof insulation (PRI) measure type specifically, suggesting there may be confusion amongst installers and that the comparatively high score in relation to loft insulation may increase the risk of incorrect installations. Due to this potential risk, they suggested TrustMark should ensure that monitoring systems are prepared.

7.3. One respondent disagreed with the introduction of deemed PPS for district heating system (DHS) connections. They stated a preference for bespoke PPS based on pre- and post- installation SAP assessments, as they felt this would ensure scores are sufficient to support the high capital costs associated with DHS.

7.4. No respondents disagreed with the introduction of a hybrid wall insulation (HWI) measure type.

Ofgem response

Pitched roof insulation

7.5. We acknowledge a few stakeholder's feedback on the potential confusion between the use of pitched roof insulation and standard loft insulation, and the comparatively high score for PRI potentially increasing the risk of incorrect installation.

7.6. However, we have decided to maintain our position and introduce a PRI measure for ECO4.

7.7. The reason the PRI score is larger than the loft insulation score is that GB housing stock data suggests that pitched roofs typically have little or no insulation present initially. In contrast, most lofts have some insulation already present. As a result, the baseline for pitched roofs is lower, and the savings from the installation of PRI is higher. There is insufficient data available to support the use of different u-values based on the age of the property.

7.8. In the absence of specific data, the post-installation u-value achieved by pitched roof insulation was assumed to be the same as for loft insulation, being improved in both cases to a u-value of 0.185. The PRI scores also consider the larger heat loss area of roofs insulated at rafter level compared to joist level.

7.9. Loft insulation and PRI have separate PAS 2030:2019 annexes with differing competency requirements. The PRI annex reflects the associated additional complexity. Therefore, the risk of the incorrect type of insulation being installed should be mitigated through the PAS 2035 process.

7.10. To avoid confusion, we also plan to include instructions on when the PRI score can be claimed in our ECO4 Delivery Guidance. We intend to prevent the use of PRI in any loft spaces. If PRI was installed in a cold loft space, this would essentially add another room to the property and change the property's thermal envelope. This is not something which the ECO4 scheme is intended to support. The PRI score is intended for the insulation of sloped ceilings in an existing habitable room (which does not meet the definition of a room-in-roof, for which there is a separate score).

Hybrid wall insulation

7.11. Based on stakeholder’s responses we intend to introduce a hybrid wall insulation measure type in ECO4.

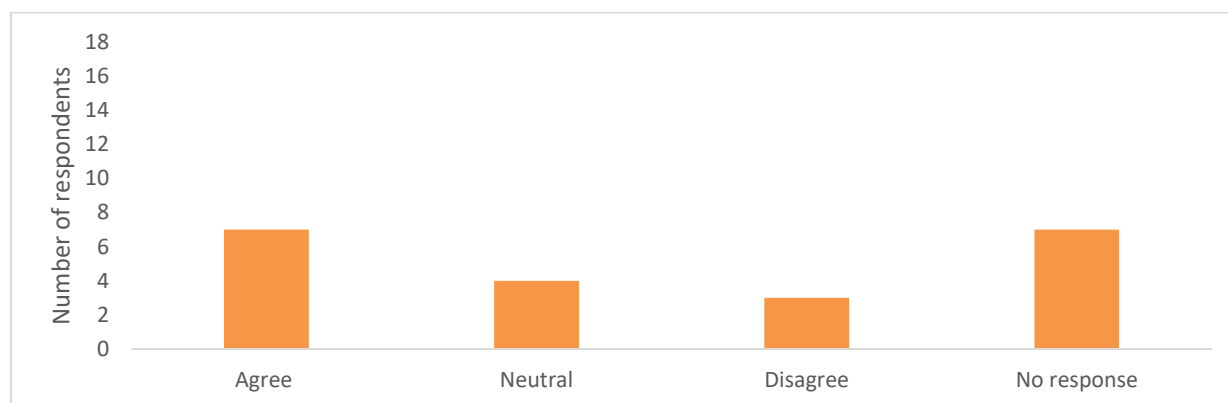
7.12. We note respondent’s request for clear guidance on this new measure type and will publish further details in the ECO4 Delivery Guidance.

District heating systems

7.13. Based on the broad agreement from stakeholders, we intend to introduce PPS for new DHS connections in ECO4.

7.14. We considered feedback on the use of bespoke PPS based on pre-and post-installation SAP assessments. However, we do not feel there is strong justification for a bespoke approach for DHS scores. For all measures, the deemed PPS are based on averages and in most cases, they will be replaced by FPS. Furthermore, bespoke PPS would increase the administrative burden and the potential for misrepresentation.

Question 18: Do you agree with the approach and assumptions used to derive the scores for the pitched roof insulation measure? If not, please provide alternative suggestions.



	Agree	Neutral	Disagree	No response
Number of stakeholders	7	4	3	7
% of stakeholders	50%	29%	21%	

Figure and Table 28: Summary of stakeholder feedback to question 18 of the ECO4 scoring consultation methodology part 2

Summary of responses

7.15. Stakeholders who agreed to our proposal welcomed our approach and highlighted its simplicity. One stakeholder mentioned the importance of defining the level of existing loft insulation present to be eligible for a PRI measure.

7.16. One respondent agreed with our proposal but was concerned that pitched roof insulation and loft insulation may be flagged as duplicates by Ofgem, either within ECO4 or against previous schemes.

7.17. Another stakeholder noted that, unless the property was built within the last 30 years, they have commonly found pitched roofs have no insulation. They suggested multiple scores with different starting u-values based on the age of the property.

7.18. A few stakeholders disagreed with our approach to PRI scores. One suggested removing the distinction between existing and no pre-existing insulation, as it is extremely rare for there to be existing roof insulation in place.

7.19. Other respondents were concerned about the large difference between the loft and pitched roof insulation scores, and the impact this may have on delivery of loft insulation measures. They requested further details and guidance on the criteria for claiming a PRI score and the interaction with loft insulation measures.

Ofgem response

7.20. Stakeholders main concerns focused on the large difference between the PRI score and the standard loft insulation score. They also highlighted the importance of defining what level of existing loft insulation is acceptable for a subsequent PRI measure.

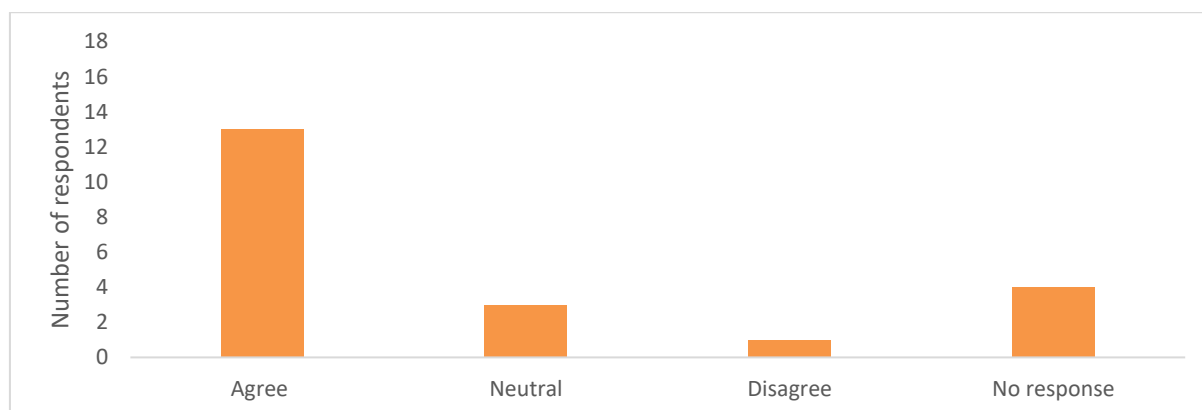
7.21. We acknowledge concerns around the difference between loft and pitched roof insulation scores. The difference is a consequence of the u-value assumptions used in

calculating the scores. As set out in our response to question 17, GB housing stock data suggests that pitched roofs typically have little or no insulation present, a point supported by feedback from some stakeholders. In contrast, most lofts have some level of insulation already present. As a result, the baseline u-value for pitched roofs is lower.

7.22. As noted in our response to question 17, we plan to publish guidance on when the PRI score can be claimed and will restrict the use of PRI in any loft spaces. This should mitigate concerns around the use of PRI in place of standard loft insulation.

7.23. As PRI measures will not be eligible in any loft spaces, we do not expect there to be duplicates with previous loft insulation measures.

Question 19: Do you agree with the approach and assumptions used to derive the scores for the district heating system connection measure? If not, please provide alternative suggestions



	Agree	Neutral	Disagree	No response
Number of stakeholders	13	3	1	4
% of stakeholders	76%	18%	6%	

Figure and Table 29: Summary of stakeholder feedback to question 19 of the ECO4 scoring consultation methodology part 2

Summary of responses

7.24. Most stakeholders agreed with our approach and noted that this should clarify scoring district heating projects .

7.25. One stakeholder who agreed noted that in ECO3 DHS measures require a full SAP assessment and wanted to better understand the rationale behind the change to deemed PPS. Another respondent welcomed the inclusion of heat meters and heating controls in the DHS scores and proposed this should be adopted with the boiler scores in ECO4.

7.26. A concern with some stakeholders was that the scoring method would only be effective if pre and post retrofit SAP bands were correctly determined. One stakeholder provided an alternate scoring methodology, where factors would be applied to update the electricity tariffs in SAP 2012 for properties currently heated by storage heaters. They felt the use of updated tariffs would give a more reflective starting SAP band and more accurate savings for new DHS connections.

7.27. Stakeholders who disagreed with our approach raised concerns regarding the complexity of DHS, as this is a high capital expenditure measure and has a long delivery lead time. Therefore, when a DHS measure is not a final measure within a project, any deemed PPS granted will be insufficient to make it financially viable.

Ofgem response

7.28. We plan to maintain the approach used to derive the partial project scores for new district heating system connections. SAP 2012 has the capability to model two types of tariffs for DHS connections – non-CHP and CHP tariffs. The DHS scores will therefore be based on the non-CHP and CHP tariffs available in SAP.

7.29. We recognise the proposal to use an alternative approach and apply a factor to the SAP 2012 electricity tariffs. However, we anticipate that the ECO4 legislation will require the scoring methodology to be based on the current version of the SAP (SAP 2012), and thus full project and partial project scores will remain based on SAP 2012 unless the legislation is changed to require an update to the scores. We are required to administer the scheme in accordance with the legislation set by BEIS and are not able to alter the tariffs used by SAP.

7.30. We acknowledge concerns that DHS projects may be more complex and take longer than other measures to deliver, and therefore the PPS may not be sufficient. However, we are required to develop PPS which represent the average heating cost saving of the measure. The scores are not based on cost of delivering a measure.

Appendices

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Appendix	Name of appendix	Page no.
1	Table of responses	77

Appendix 1: Table of responses to part 1 and 2 of the consultation

Question	Agree	Neutral	Disagree	No response	Total	
Part 1						
1	6	5	5	1	17	
2	9	5	3	0	17	
3	4	8	5	0	17	
4	Not applicable					
5						
6	9	2	6	0	17	
7	9	2	4	2	17	
8	12	2	3	0	17	
9	5	2	9	1	17	
10	15	0	0	2	17	
11	10	3	2	2	17	
12	16	0	0	1	17	
13	2	1	12	2	17	
Part 2						
1	16	3	1	1	21	
2	17	0	2	2	21	
3	9	1	10	1	21	
4	9	4	4	4	21	
5	9	4	4	4	21	
6	14	1	1	5	21	
7	12	5	1	3	21	
8	9	5	3	4	21	
9	15	1	1	4	21	
10	14	3	0	4	21	
11	Not applicable					
12	16	1	0	4	21	
13	15	1	1	4	21	
14	14	2	1	4	21	
15	7	4	6	4	21	
16	13	3	1	4	21	
17	PIR	10	3	1	7	21
	HWI	12	2	0	7	21
	DHS	10	5	1	5	21
18	7	4	3	7	21	
19	13	3	1	4	21	