

Minutes of the ECO4 Innovation Technical Advisory Panel

From: Victoria Truelove

Date: 21 February 2023

Time: 09:00 – 13:20

Location: Conference Call

A technical advisory panel (TAP) has been set up to review innovation measure applications and make recommendations to Ofgem to approve or reject applications. It is formed by a number of independent panel members, with its Chair and Secretariat function provided by Ofgem. The TAP makes recommendations to Ofgem to approve or reject IM applications. It does not, in and of itself, make any decisions to approve or reject such applications. Accordingly, these minutes provide a summary of each discrete review undertaken by the TAP as discussed by TAP members during group meetings. The TAP review is limited to the material submitted by applicants at application stage, or in subsequent correspondence, and these minutes provide a summary of the opinions offered by TAP members on the material submitted insofar as they inform the eventual recommendation made by the TAP. These minutes are reviewed by the TAP members prior to publication. These minutes do not represent a formal statement of opinion by Ofgem in regard to any product, measure, or application received by Ofgem in relation to ECO. Applicants who wish to challenge the opinions contained within these minutes may contact Ofgem directly.

1. Present

Adrian Hull, (Panel Member) THS Inspection Services

Cliff Elwell, (Panel Member) University College London

David Glew, (Panel Member) Leeds Beckett University

Jason Palmer, (Panel Member) Cambridge Energy

Paul Phillips, TrustMark

Hunter Danskin, DESNZ

Kay Popoola, DESNZ

Andy Morrall, Ofgem

Reuben Privett, Ofgem

Dr Amy O'Mahoney (Chair), Ofgem

Victoria Truelove (Secretariat), Ofgem

2. Introductory remarks by the Chair

2.1. The Chair welcomed all panel members and attendees to the meeting.

3. Innovation Measure Application: Wetherby Fit and Forget

3.1. The application is for the addition of EWI system components to be considered under the ECO3 approved innovation measure, IM011, offering enhanced product life-time and a 25-year maintenance plan commencing after the year 1 inspection.

3.2. The TAP did not raise concerns about the certifications submitted for the product.

3.3. The TrustMark representative did not raise concerns about PAS compliance and lodgement through TrustMark.

3.4. Details on the extended warranty within the provided evidence was discussed by the TAP, as well as the cost this may incur for fuel poor households.

3.5. Maintenance requirements outlined within the BBA certificates were discussed by the TAP, particularly in relation to system lifetime and interactions with warranties.

3.6. The TAP also discussed a scenario where installers were no longer in business, and queried who would be liable for system repairs.

3.7. The approval of the IM application under ECO3 was discussed by the TAP, with recognition of the provided warranty strongly supporting the claimed system lifetime and previous recommendation for approval.

- 3.8. The TAP discussed two alternative insulating products being deliverable as part of the EWI system under application. One of the deliverable insulation products was noted as having improved thermal performance and a slight increase in robustness, and the TAP expressed a preference for the superior product.
- 3.9. A Q&A was not held with representative(s) for this application.
- 3.10. The TAP was of the view, that subject to clarifications, the product may be recommended for a standard innovation measure under the approved IM 011.

4. Innovation Measure Application: Insta Robust

- 4.1. The application is for an EWI system comprised of EPS insulation boards, with a reinforced embedded glass fibre mesh, with a claimed 60-year lifetime. The measure is to be offered with a 25-year maintenance plan commencing after the year 1 inspection.
- 4.2. The TAP did not raise concerns about the certifications submitted for the product.
- 4.3. Previous history related to the application was outlined by Ofgem as the submission of an application under TAP1. The TAP was of the view the applicant had implemented feedback provided following TAP1, in particular, the approach to remediation costs.
- 4.4. The TAP acknowledged the need for the system to meet the requirement to address thermal bridging below DPC in line with the requirements of PAS2035 and PAS2030.
- 4.5. The TrustMark representative did not raise concerns about PAS compliance and lodgement through TrustMark.
- 4.6. The supporting evidence for the maintenance and inspection regime was discussed by the TAP. It was noted contradictions were present, which could lead to different interpretations. The TAP recommended the information included within this document, in particular within the diagram, is re-submitted, addressing clarifications.

- 4.7. Clarifications were raised around what the maintenance and inspection regime evidence document presented, and how this would encompass the maintenance requirements outlined in the BBA certification and potentially impact warranty provisions.
- 4.8. The costing evidence, product lifetime, and duration of the maintenance and inspection regime was discussed by the TAP. Similarities with approved IM011 were noted, and clarifications raised around maintenance and inspection following expiry of the provided warranty.
- 4.9. The TAP discussed the submitted BBA evidence and the product lifetimes outlined therein, noting the product under application would need to meet equivalence to IM011.
- 4.10. The TAP discussed the usage of stainless steel and galvanised screws and fixtures, noting these are not equivalent, with galvanised fixtures not being as durable. Stainless steel fixtures were highlighted as being more suitable for supporting the system lifetime claimed by applicant.
- 4.11. The TAP noted they would like additional evidence supporting the claim that inspection and maintenance costs will not be placed on householders. A long-term funding implementation plan where discussed, in particular when installation companies were no longer in business. The TAP was of consensus on additional costs not being placed on householders requiring confirmation from the applicant.
- 4.12. Warranty and extended warranties were discussed by the TAP, including invalidation clauses and future costings, such as costings for warranty renewal.
- 4.13. The TAP was of the view an improvement against the increased durability criterion had been evidenced, noting the system would be more durable with the inspection regime.

- 4.14. The TAP was of the view an improvement against the other criterion had been evidenced through the cost covering for the inspection plan, increasing the durability of the measure.
- 4.15. The TAP noted improved costings evidence to support cost saving claims made within the application should be provided.
- 4.16. The TAP was of the view the removal of costs to the householder as part of the maintenance and inspection regime were of benefit to fuel poor and vulnerable to the cold households.
- 4.17. In the Q&A, the TAP queried section 12 of the system BBA and its inclusion within the maintenance plan. The representative confirmed these aspects would be maintained as part of the overall maintenance plan, at no cost to the householder.
- 4.18. In the Q&A, the TAP noted steel fixtures would increase system lifetime. The representative accepted they would use steel fixings.
- 4.19. The TAP asked for clarifications on the maintenance plan provided within the Q&A, outlining aspects causing confusion. The representative provided verbal clarifications on the maintenance plan provided, particularly around diagram details.
- 4.20. Clarifications on the costing provided for the maintenance plan were raised by the TAP within the Q&A. The representative provided additional details verbally.
- 4.21. The approach to informing the householder of warranty renewal and extension details was queried by the TAP within the Q&A. The verbal clarification provided by the representative the approach would require further exploration, but householders would be assisted and supported.
- 4.22. The TAP was of the view, that subject to further clarification, the product may be recommended for a standard innovation measure under the approved IM 011 description.

5. Innovation Measure Application: BASF Firetite

- 5.1. The application is for a limited combustibility class A2 fire rated, mineral based injection insulation material ideal for new and refurbished cavity wall insulation, combining the benefits of a hydrophobic and open-pore mineral insulation material with the fast, safe, and seamless airtight process of a self-sealing foam system.
- 5.2. Previous history related to the application was outlined by Ofgem, as successfully trialed and delivered in Turkey and European countries.
- 5.3. The TAP noted the BBA certification and installation manual provided did not include a fire classification, and highlighted a fire classification may be included within the pending certification.
- 5.4. It was noted by the TAP the data sheet provided detail on the component ratio for creating the insulant product. The TAP was of the view additional detail on the type of machinery employed would support product understanding.
- 5.5. The TrustMark representative did not raise concerns about PAS compliance and lodgement through TrustMark.
- 5.6. The TAP was of the view costings for the measure under application did not reflect savings on materials against comparable measures. It was also noted detail on labour costs had not been provided within submitted evidence.
- 5.7. The TAP was of the view the evidence provided did not support the claims made against the reduction in cost of installation criterion. The TAP noted holistic costing for complete measure installation for the product and comparable measures could be supporting evidence for this criterion.
- 5.8. The TAP noted an assumed lifetime had been employed for claiming against the increased durability criterion, with no evidence that Firetite would outlast alternative insulation products.

5.9. The TAP was in consensus, claims against the improvement in environmental criterion were not sufficiently substantiated. Lifecycle or equivalent analysis was highlighted as strong supportive evidence to support claims against this criterion.

5.10. TAP was of the view claims against the reduction in disruption to householders criterion were not sufficiently substantiated. Paired case studies were highlighted as strong supportive evidence against the reduction in disruption criterion and in claims supporting increased speed of installation.

5.11. The delivery of CWI products at high rise buildings was viewed by the TAP as being widely available within the market.

5.12. Real-life moisture management monitoring was highlighted by TAP as being required to support moisture management claims.

5.13. The TAP noted spray foam is permanent and discussed comparisons on removability against comparable measures.

5.14. A Q&A was not held with representative(s) for this application.

5.15. The TAP was of the view the product under application should be rejected with feedback.

6. Innovation Measure Application: Smart Fix RIRI

6.1. The application is for a Room in Roof Insulation (RIRI) system comprised of Aerogel insulants to reduce the thickness of the insulation boards, and pre-fabricated insulated services panel to reduce cold bridging around services.

6.2. Previous history related to the application was outlined by Ofgem as being the approval under ECO3 of IM014 - Smart Fix Systems RIR (Aerogel).

6.3. The TAP was of consensus they would want to view the final KIWA certificate for this product.

- 6.4. The TrustMark representative did not raise concerns about PAS compliance and lodgement through TrustMark.
- 6.5. The TAP noted aspects of the application relating to breathability seemed unclear, and approaches to the removal of existing plaster, paint, or render discussed, as would be required to ensure breathability. Internal and external breathability areas of the system were discussed by the TAP.
- 6.6. Additional detail on how system breathability would be ensured, prior to measure delivery, was highlighted by the TAP as being required to support claims.
- 6.7. The mechanism detail behind WUFI testing was noted by the TAP as not being present.
- 6.8. A TAP member noted alternative options for IWI using more sustainable materials should be encouraged.
- 6.9. The TAP was of the view the approach to system delivery around window reveals was good, highlighting a comparison against comparable measures would be of benefit.
- 6.10. The TAP discussed the reasoning behind the approval of ECO3 IM014.
- 6.11. Thermal bridging was discussed, with the TAP highlighting a dwarf wall diagram within a submitted evidence document reflecting that thermal bridging would occur. A clarification on the diagram was recommended by the TAP, as it may otherwise cause confusion with the BEIS best guidance practice. Further specific thermal bridging detail for junctions and window details would also be beneficial.
- 6.12. The TAP was of the view insufficient evidence was provided against the decrease in installation costs criterion, particularly around installation times. Timed videos and paired comparisons of measure delivery on identical properties were highlighted by the TAP as suitable evidence for accurate comparisons against comparable measures.
- 6.13. The TAP discussed maintenance products available for magnesium oxide boards, noting these are harder to fix than the provided comparison. A clarification on this was noted as being of benefit.

- 6.14. The TAP was of the view claimed improvement against the increase in durability criterion required additional evidence for evaluation against the comparable measure.
- 6.15. The TAP was of the view claimed an environmental improvement had not been sufficiently evidenced, particularly in relation to system production/manufacturing.
- 6.16. The TAP noted within the GB, there are not many insulation products addressing the thermal bridging behind the plug sockets.
- 6.17. A Q&A was not held with representative(s) for this application.
- 6.18. The TAP was of the view an application should be submitted for the product to be considered for inclusion under the existing IM 014.

7. Additional Discussion:

- 7.1. The TAP discussed with Ofgem and DESNZ approaches for gathering insight and learnings from applications received under the IM pathway. Numerous different options were explored which could be developed going forward and which may offer valuable insight into the innovation process.

8. Date of next meeting

- 8.1. Further planned upcoming TAP meetings are available on our [website](#).